

**Report of the
Commissioners
of the
District of
Columbia**

**1890-1891
Vol.1**

(Washington, DC)

ANNUAL REPORT

OF THE

COMMISSIONERS OF THE DISTRICT OF COLUMBIA

FOR

THE YEAR ENDED JUNE 30, 1891.

District of Columbia, Commissioners
T: Report

WASHINGTON:

GOVERNMENT PRINTING OFFICE,

1891.

WASHINGTON, D.C.

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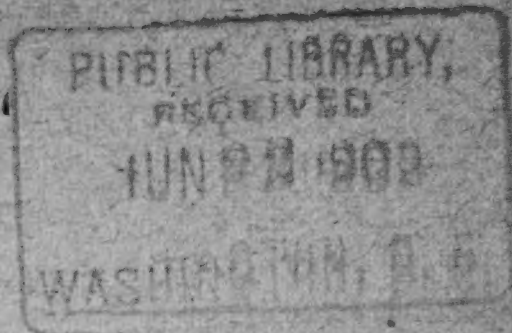
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ANNUAL REPORT
OF THE
COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

OFFICE OF THE COMMISSIONERS,
DISTRICT OF COLUMBIA,
Washington, December 7, 1891.

The PRESIDENT:

The Commissioners of the District of Columbia hereby submit, for transmission to Congress their annual report of their official doings for the fiscal year ended June 30, 1891.

The details of these transactions are contained in the accompanying report of the officers in immediate charge of the several branches of the District government.

Statement of revenues of the District of Columbia and appropriations by the United States for the fiscal year ending June 30, 1891.

From what source received.	Detail.	Total.	Aggregate.
REVENUES OF THE DISTRICT OF COLUMBIA.			
Balance to the credit of the District of Columbia in the U. S. Treasury, July 1, 1890, available for appropriation.....			\$105,512.53
Amount credited to the revenues of the District of Columbia on account of 48-inch and Fourteenth-street water-mains transferred to water fund, act March 3, 1891:			
48-inch main		\$282,145.45	
Fourteenth street main		27,535.29	309,680.74
Unexpended balances of appropriations carried to the credit of the general fund—District of Columbia half.....			50,328.02
General taxes, including penalties.....	\$2,290,536.88		
Licenses	158,200.57		
		2,448,737.45	
Eastern market rents.....	3,446.00		
Western market rents.....	6,239.80		
Georgetown market rents	1,218.00		
Washington Market Company franchise rental.....	5,625.00		
		16,528.80	
Rent of hay scales.....	1,399.35		
Rent of wharves, street termini and buildings	2,138.75		
Rent of fish wharves and stalls.....	336.30		
		3,874.40	
Fines, police court:			
District of Columbia cases.....	34,620.48		
United States cases	12,891.36		
		47,511.84	
Fees for tax certificates	3,145.00		
Permit fees for sewers and gas	4,669.00		
Building permits.....	9,901.92		
Tax on dogs.....	12,171.07		
Pound fees	696.25		
Fees for inspecting gas and meters.....	367.00		

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Statement of revenues of the District of Columbia, etc.—Continued.

From what source received.	Detail.	Total.	Aggregate.
REVENUES OF THE DISTRICT OF COLUMBIA—continued.			
Engineers' licenses.....	\$603. 00		
Material furnished.....	17. 80		
Sale of old material.....	998. 46		
Surplus from sale of contractors' guaranty bonds.....	5. 60		
Labor and sale of products of Reform School.....	1, 423. 94		
Riggs estate, judgment case of Woodbury <i>vs.</i> District of Columbia.....	7, 500. 00		
Baltimore and Potomac Railroad Company, reimbursement for Eastern Branch bridge.....	10, 000. 00		
Proceeds of sale of property of Eastern Branch bridge.....	67. 08		
Advertising.....	945. 57		
Recording tax sales.....	41. 60		
		\$52, 553. 29	\$2, 569, 205. 78
Total revenues of the District of Columbia.....			3, 034, 727. 07
APPROPRIATIONS BY THE UNITED STATES.			
General expenses of the District of Columbia, 1891, act Aug. 6, 1890.....	5, 556, 377. 18		
Education of feeble-minded children, act Aug. 30, 1890.....	3, 400. 00		
Support of convicts, 1891, act Aug. 30, 1890.....	21, 000. 00		
Rock Creek Park, act Sept. 27, 1890.....	92, 000. 00		
Deficiencies, act Sept. 30, 1890.....	97, 173. 39		
Deficiencies, act Mar. 3, 1891.....	69, 082. 30		
	5, 839, 032. 87		
One-half of which is.....		2, 919, 516. 43	
Public bathing beach, act Sept. 26, 1890.....		3, 000. 00	
			2, 922, 516. 43
Surplus—balance to credit of the District of Columbia in the U. S. Treasury, June 30, 1891, available for appropriation.....			112, 210. 64

Receipts on account of special and trust funds for the fiscal year ended June 30, 1891.

On what account received.	Total.
Water taxes and rents.....	\$272, 495. 01
Washington special tax fund.....	660. 37
Washington redemption fund.....	3, 561. 96
Redemption of tax-lien certificates.....	741. 68
Redemption of assessment certificates.....	694. 43
Contractors' guaranty fund, act June 11, 1878.....	45, 200. 23
Policemen's relief fund, act Feb. 25, 1885.....	11, 227. 61
Firemen's relief fund, act Feb. 25, 1885.....	1, 698. 17
Total.....	336, 279. 46

DEBT.

Funded debt.—The bonded debt of the District is, by the law of June 11, 1878, establishing the present form of government, placed under the charge of the Treasurer of the United States. The Commissioners' only duty in relation to it is to include in their annual estimates for the support of the District government an estimate for the interest and sinking fund thereon, and for the salaries and contingent expenses of the clerical force employed by the Treasurer in keeping the sinking fund accounts. The amount of that debt on June 30, 1891, was \$19,500,300.

Floating debt.—The only floating indebtedness of the District consists of accounts unsettled because they are not covered by antecedent appropriations. It is very small in amount, and consists principally of

judgments of the courts rendered subsequent to the passage of the current annual appropriation law, and of the obligations incurred to meet minor emergencies.

Water supply debts.—The District, on June 30, 1891, owed the United States \$831,501.87, on account of the advances for the constructing of the water-supply tunnel and appurtenances, and \$295,912.69 on account of advances for 48-inch water main and the Fourteenth street water main and connections. The first is payable in nineteen, and the latter in twenty-five equal annual installments, with interest at 3 per cent per annum, out of the revenues of the water department.

GENERAL ASSESSMENT.

The assessor reports the general assessment on real and personal property on June 30, 1891, which is the basis of the general tax for the fiscal year to end June 30, 1892, as follows:

Washington:		
Taxable on land	\$64, 257, 934	
Taxable on improvements	62, 125, 650	
		\$126, 383, 584
Georgetown:		
Taxable on land	2, 698, 476	
Taxable on improvements	2, 984, 200	
		5, 682, 676
Suburban:		
Taxable on land at \$1.50	6, 480, 584	
Taxable on improvements at \$1.50	3, 006, 150	
		9, 486, 734
Taxable on land at \$1	3, 014, 034	
Taxable on improvements at \$1	914, 250	
		3, 928, 284
Total assessed value of real estate		145, 481, 278
Personal property:		
Washington	11, 146, 341	
Georgetown	558, 834	
County	121, 015	
		11, 826, 190
Total assessed value of real and personal property in the District of Columbia on June 30, 1891		157, 307, 468

RATE OF TAX.

The maximum rate of general tax on real and personal property, which is fixed by law at \$1.50 on each \$100 for all taxable personal property, and for all real property except that used solely for agricultural purposes, the rate of which is \$1 per \$100, is the current levy.

COLLECTION OF REVENUE.

The collector of taxes reports the collection and deposit by him in the Treasury of the United States of revenue received during the year as follows:

Tax on real property	\$2, 094, 492. 66
Tax on personal property	169, 624. 79
Penalties on arrears of taxes	67, 147. 29
Miscellaneous	272, 100. 80
Water revenue	270, 866. 47
Total	2, 874, 232. 01

ARREARS OF GENERAL TAXES.

The amount of uncollected general taxes for years subsequent to 1872, on June 30, 1891, was, on real property \$494,886.42, and on personal property \$241,698.

MAKING OUT TAX BILLS.

The provision of the law of March 3, 1881, which requires the assessor to furnish the collector with a duplicate of the general assessments on the 1st day of November of each year, is an infeasible requirement with the present clerical force, and even if it could readily be done would be of no practicable service. This legislation should be repealed and the assessor required to make out all tax bills. No good reason has ever been given why the collector should make out the bills for the taxes which he collects, but on the contrary, on every principle of good accounting, the bills should be made out by an official entirely independent of the one who makes the collection. The assessments upon which these bills are based should be in the custody of the officer who renders the bills.

The Commissioners have placed in their estimates for 1893 recommendations for a readjustment of the clerical force in the collector's and assessor's offices, to give the assessor the supervision of the clerks by whom the tax bills are prepared.

CERTIFICATES OF TAX ACCOUNTS.

The act of February 6, 1879, requiring the collector of taxes to make out certificates as to the condition of the tax accounts of property, should also be amended so as to transfer that duty to the assessor, who is in charge of the records containing the data upon which such certificates are based. The collector's signature to the certificates is entirely perfunctory, as the certificates are made up in the water department and in the office of the assessor, who in this respect renders the service of a clerk to the collector. It is not fair to the collector to hold him responsible for work performed by the engineer's and assessor's clerks, nor is it fair to the assessor to deprive him of credit for work performed in his office.

REASSESSMENT OF INVALIDATED TAXES.

The decision of the supreme court of the District of Columbia in the Brewer and Pelling cases, to the effect that the purchase at tax sale of a piece of property relieves said property of the lien of all unpaid prior taxes against it, is the source of considerable direct loss of revenue, and an encouragement to taxpayers to be dilatory and neglectful in settlement of their obligations in this respect, by holding out the hope that they may ultimately evade contributing their just share to the support of the Government. It is impracticable with any reasonable amount of clerical assistance to effect such a compliance with the present law as will avoid the condition of affairs which entails the loss of revenue as mentioned. The collection of a large amount of special taxes has been interdicted by the courts because of technical errors. Authority should be given for the reassessment of the taxes and assessments rendered uncollectible under those rulings.

LAND DESCRIPTIONS IN DEEDS.

Through carelessness or ignorance in the preparation of deeds, it happens in many cases that the description of the property designed to be transferred is incorrect. This is a source of embarrassment to the assessor's office as well as to the grantor, and should be obviated by the passage of a law prescribing that no deed shall be recorded by the recorder of deeds unless it is accompanied by a certificate of the surveyor that the property is properly described in the conveyance.

GENERAL ASSESSMENTS.

The Commissioners are not yet able to express any view as to the probable outcome of the general triennial assessment now in progress by the three assessors, appointed under the District appropriation act of March 3, 1891, to perform that duty, in lieu of the unsatisfactory system that previously prevailed. From the high personal and business reputation of the gentlemen charged with that duty, they anticipate a result much more equitable and satisfactory than the present assessment.

LICENSES.

The revenue from licenses might be largely increased and the burden of license tax more equitably distributed by a revision of the laws on the subject. This is especially true with regard to the traffic in intoxicating liquors.

THE LIQUOR TRAFFIC.

The Commissioners, during the first session of the Fifty-first Congress, prepared and submitted to that body drafts of two bills, H. R. 10045 and 10046, giving their views on the subject, but neither of them received the ultimate action of the committees to which they were referred. Either of these bills would effect a great improvement on the present law on the subject, both with respect to increase of revenue and to the better regulation and surveillance of the business.

The following extract from our report of last year is reproduced and its consideration reurged:

In their last annual report the Commissioners said: "The law regulating the issue of licenses for the sale of intoxicating drinks in the District of Columbia is not satisfactory." This is still true with the added emphasis of another year's experience. To remedy this condition they presented to Congress, at its last session, two bills designed to accomplish what is known as the "high license system." This system has been and is being tried in many of the States and cities of the country and found to produce desirable results in the decrease of violent crimes and vagrancy, and a proportional increase of happy homes and families. With these enviable results also come a great reduction in the court and police expenses, and a decreased poorhouse and workhouse population. The experience in those communities also shows that high-license fees put the business into the hands of dealers who, as a rule, are obedient to the law and helpful to the executive officers and agents of the municipalities affected.

The Commissioners can make, thanks to the courts, all kinds of reasonable regulations, but can not prescribe evidence or impose penalties, and just in these two particulars is the law limp and ineffective.

The Commissioners estimate that a good law of the kind recommended would raise not less than \$300,000 of District revenues, which, with a like sum from the United States, would give from this source alone \$600,000 for yearly improvements.

Within the past year there has been some terrible examples of the baneful effects of the overuse of alcoholic drinks in the District. We

are still hearing of the good results of the high-license system elsewhere, and are the more anxious to have its benefits in the District.

COMMISSION MERCHANTS.

The license law should also be amended so as to afford protection to consignors of goods to be sold here on commission. At present the consignor has to rely solely on the honesty of the factor, and while in general the word of our commission merchants is as good as their bond, there are occasional instances where unworthy persons engage in the business and bring reproach upon responsible agents by flagrant breaches of good faith.

INSURANCE LAWS.

The insurance laws of the District are also in an unsatisfactory state. Adequate power should be given to the authorities to protect duly licensed companies doing a legitimate business from fraudulent and unjust competition and the public from imposition.

The commissioners will submit to Congress at its present session drafts of bills embodying their views as to the necessary correctional legislation on these subjects.

NEW BUILDINGS.

The inspector of buildings reports the issue by him of 4,582 permits for the erection, repair, and addition of buildings, at an estimated value of \$7,804,301, at an increase of 75 in the number of permits and \$51,468 in valuation over the record of the preceding year. The inspector expresses the opinion that the force at his disposal for the inspection of work in progress is not large enough to give proper service in that respect. The Commissioners recommend that due provision be made for that service in order that the public interests and safety shall not be jeopardized by lack of such official supervision.

PUBLIC SCHOOLS.

The Commissioners are glad to be able to report the continued prosperity of the public schools. During the decade ended 1890, the population of the whole country increased something more than 24 per cent; the increase in the growth of the District during the same time was a little more than 29 per cent, whereas the increase in the attendance on the public schools of the District for the same period was a little more than 39 per cent.

The growth of the schools during the past year was a little less than 5 per cent, showing, as the Commissioners believe, the continuance of a healthy progress of the schools as well as of the confidence of our people in their usefulness and efficiency.

We are educating at public cost about 40,000 children in the day schools, and are giving instruction in the night schools to about 2,500 persons.

The experiment of furnishing text books free to pupils of the lower grades of school is being tried the current school year. This experiment will be guarded with care and watched with great interest. The Commissioners have given their indorsement to the movement by mak-

ing estimates to continue free books where they have been placed, and for extending the experiment to higher grades.

FIRE DEPARTMENT.

The Fire Department has successfully met all the demands upon its services since our last report. The increasing extent of territory to be protected, and number and size of the buildings within its purview, render it the part of wisdom to correspondingly enlarge the force and plant of the Department. With this object in view, the Commissioners included in their annual estimates for 1893 an estimate for a new company to be located in the northern section of Washington.

POLICE.

The high standard of efficiency which has characterized the Metropolitan Police Force is a source of pride to all of the citizens of the District. The Commissioners believe that it should be a model for every other municipality. The fact that its members are appointed on merit and after a strict examination is an important factor in securing capable men.

But the source of supply is unnecessarily limited. A statute applicable to the District, enacted in 1867, which is still in force, provides that "no person shall be appointed a policeman or watchman who has not served in the Army or Navy of the United States and received an honorable discharge."

This law was intended to benefit the survivors of the Federal Army in the late civil war. But it has long ceased to have any such effect. Physical strength and activity are so indispensable as qualifications for the force that the regulations have for many years prescribed the age of 38 years as the maximum for applicants for appointment upon the force. The applicant who is appointed at that age could have been only 12 years old at the close of the war.

The embarrassments which have attended the enforcement of this statute can not be overstated, as it substantially restricts appointments to recently discharged soldiers and sailors, many of whom enlist with the sole purpose of receiving an honorable discharge to make them eligible for policemen.

The Commissioners reiterate the recommendations made by them and their predecessors that the law be repealed.

TELEGRAPH AND TELEPHONE SERVICE.

A recent accident, due to the fall of a telegraph pole and the dangerous condition of many other poles of the various electric systems in the District, in which wooden poles are used, emphasize the importance of placing all wires so supported under ground. The Commissioners, in their estimates for 1893, made a liberal estimate for the renewal of such of those poles as are under the charge of the District government, which, from decay, are or may become a source of danger. As the subject of adopting a permanent policy with regard to the arrangement, etc., of electric wires and their supports in the public places has been referred by Congress to a special board, the Commissioners must construe that action as relieving them of responsibility to make any present recommendations in the premises.

NEW MUNICIPAL BUILDING.

In their report for the year 1890 the Commissioners said that—

It is discreditable to the nation and to this community that the municipal government at the National Capital is obliged to resort to the use of a rented building for office accommodations.

Prior to the establishment of a single government for the entire District, the offices of the city of Washington at least were housed in a building which comported with the business demands and with the dignity of the municipality which they represented. When the District government was first organized, in 1871, the governor of the District, voicing the common sentiment of the community, made the following suggestion in his message of May 15, 1871, to the legislative assembly of the District, viz:

"It is therefore recommended that measures be taken for the transfer and sale to the Government of the United States of the city's interest in the building known as the City Hall. The increased business of the courts requires the occupancy of the entire structure for that purpose. It is suggested that a site for a new building, sufficient for the accommodation of the Territorial government, can be secured upon some one of the Government reservations in the city of Washington, and that the proceeds of the sale of the city's share in the City Hall building will go toward defraying the expense of the proposed new structure."

Congress recognizing the inadequacy of the old city hall for the accommodation both of the courts and municipal offices, appropriated \$75,000 to purchase the interest of the District in this building, and restricted the use of said money to the erection of a separate municipal building.

An appraisement was made of the District's interest in the City Hall at \$75,000, the law providing that the same be applied by said District only for the erection of a suitable building for the District offices.

The money was drawn by the Treasurer of the Board of Public Works but was not expended for the specific purpose for which the appropriation was made. The money, if now treated as a portion of the revenues of the District and set aside for the purpose intended, would go far to form a nucleus of a fund to be devoted to the original purpose.

In this effort to get a suitable municipal building for the Capital of the Nation, the Commissioners have had the sympathy and support of the people of the District.

In our estimates for the next fiscal year we have recommended the appropriation of \$150,000 to begin the erection of a building. The whole should cost not less than \$300,000 nor more than \$500,000. Our opinion is that the proper place for its erection is between Ninth and Seventh streets, on the piece of land belonging to the District lying immediately in front of the Center Market. It would there be central, readily reached by street-railway and other lines of city transportation, be an ornament to the principal avenue of the city, and stand on ground already acquired by the District.

The schedule of the cost of city halls in thirty-five of fifty of the largest cities in the United States, prepared by the Census Office and herewith submitted, is significant as to the propriety and per capita cost of such buildings. The building we recommend, it will be seen, is largely below the average per capita cost of such buildings in other cities. The schedule shows that

The average cost per capita for city halls in thirty-five of fifty of the largest cities in the United States, as shown by the eleventh Census, is	\$2. 80
The average cost per capita in the District of Columbia for such a building costing \$500,000, estimated population, 250,000, would be	2. 00
A building costing \$300,000	1. 20

The design herewith transmitted shows an edifice of fine appearance, to cost within \$500,000, and large enough to accommodate all the branches of the District government now located either at headquarters or in rented buildings.

Cost of city halls in thirty-five of fifty of the largest cities in the United States from returns of the Eleventh Census.

Cities.	Population.	Total.	To each head of population.
Totals for thirty-five cities	9,523,398	\$34,118,204	\$2.80
New York, N. Y.	1,515,301	500,000	.33
Chicago, Ill.	1,099,850	1,716,389	1.56
Philadelphia, Pa.	1,046,964	14,000,000	13.37
Brooklyn, N. Y.	806,343	715,000	.89
St. Louis, Mo.	451,770	200,000	.44
Boston, Mass.	448,477	600,000	1.34
Baltimore, Md.	434,439	3,000,000	6.91
San Francisco, Cal.	298,997	5,000,000	16.72
Cincinnati, Ohio.	296,908	1,400,000	4.72
Buffalo, N. Y.	255,664	1,450,000	5.67
New Orleans, La.	242,039	300,000	1.24
Pittsburg, Pa.	238,617	500,579	2.10
Newark, N. J.	181,830	160,000	.88
Minneapolis, Minn.	164,738	56,000	.33
Jersey City, N. J.	163,003	40,000	.25
Louisville, Ky.	161,129	500,000	3.10
Omaha, Nebr.	140,452	350,000	2.49
Rochester, N. Y.	133,896	337,000	2.52
St. Paul, Minn.	133,156	507,000	3.81
Providence, R. I.	132,146	1,066,988	8.07
Denver, Colo.	106,713	180,000	1.69
Indianapolis, Ind.	105,436	141,000	1.34
Syracuse, N. Y.	88,143	300,000	3.40
Worcester, Mass.	84,655	24,000	.28
Richmond, Va.	81,388	28,000	.34
New Haven, Conn.	81,298	100,000	1.23
Paterson, N. J.	78,347	100,000	1.28
Lowell, Mass.	77,696	85,000	1.09
Nashville, Tenn.	76,168	100,000	1.31
Scranton, Pa.	75,215	126,448	1.68
Fall River, Mass.	74,398	250,000	3.36
Cambridge, Mass.	70,028	16,800	.24
Dayton, Ohio.	61,220	88,000	1.44
Reading, Pa.	58,661	30,000	.51
Camden, N. J.	58,313	150,000	2.57

STREET CLEANING.

The street sweeping and cleaning service is now being performed as efficiently as the amount appropriated therefor will permit. The Commissioners have asked for increased appropriations on this account for the next fiscal year and hope for a liberal consideration thereof by Congress, in order that the reputation of the District for clean streets may be maintained.

Since our last report a portion of this service has been improved by the introduction of a system of constant collecting by hand shovels, during the business hours of the day, all bulky deposits on the carriage-way of Pennsylvania avenue. The results of this system have met the unqualified approbation of the citizens generally, of the officers of this municipality, and of the people who occupy the buildings along the thoroughfare thus cleaned. The cost of cleaning the street on this method is but slightly greater than that of sweeping by machines, while the results are far more satisfactory.

The Commissioners hope to extend this hand-cleaning system to other business streets and city thoroughfares upon which there is an exceptionally large amount of travel.

REMOVAL OF GARBAGE AND DEAD ANIMALS.

On the 3d of September, 1891, the Commissioners received written notice from the contractor for the collection and removal of garbage and

for the removal of dead animals from the District of Columbia that he would no longer attempt to execute his contract, which, by its terms, was not to expire until the 30th day of June, 1892. This action of the contractor, occurring at a period of the year when the accumulations of garbage were greatest and most dangerous to the health of the people, was a source of great embarrassment to the Commissioners. They at once authorized the health officer to employ teams and men to act under the supervision of a number of inspectors, who succeeded in removing the accumulations of garbage, which had become very great, and in attending to the many complaints which were sent to the health office.

On the 8th day of September, 1891, the Commissioners caused advertisements to be published in newspapers in New York, Philadelphia, Baltimore, and Washington inviting proposals for said service for the remainder of the fiscal year, to be opened on the 22d of September. On that day only one bid was presented, which was for the sum of \$34,200. This bid, being largely in excess of the appropriation, could not be accepted and the daily service has been continued. Necessarily, this daily service has been more expensive than would be like service under the control of a contractor, although the health officer and his assistants gave personal attention to all of its details and used extraordinary efforts to conduct the business with economy.

On the 25th day of November, in response to other invitations for like proposals, bids were opened for a daily service and the lowest bidders have been accepted, but in the meantime the appropriation for the current year has been practically exhausted, and it will be necessary that provision be made for this important service by an appropriation for the remainder of the current fiscal year at the earliest practicable moment.

Anticipating the letting of another contract on the 1st day of July, 1892, for the permanent garbage service, the Commissioners also invited bids to be opened on the 1st day of December for such service, contingent upon an appropriation to be made by Congress. It must be apparent that any contractor who would perform this work to the satisfaction of the people of the District must have a sufficient length of time prior to the beginning of his work to prepare the necessary plant for the utilization of the garbage when collected and deposited, and the Commissioners therefore recommend that Congress take action upon this matter by authorizing the Commissioners to make a contract at as early a date as possible, in order that some satisfactory assurances can be given the contractor several months in advance of the expiration of the fiscal year.

FLOWER MARKET.

"The Florists' Club, of Washington, D. C.," after consultation with many of the citizens, ladies and gentlemen both, addressed the Commissioners during the recent fall upon the subject of a permanent flower market. They urge the erection upon the ground that their present quarters in the general markets are inadequate, the business having grown so much during the last decade. It will readily appear that if the business were massed together in a building largely constructed of iron and glass, with due attention to style and ornament, it would make a beautiful feature in our public improvements and facilitate the large business of purchasers and sellers.

We have thought of the little square lying between Pennsylvania avenue and Louisiana avenue and bounded on the east by Ninth street. The proximity of this parcel of ground to the central market and two

leading street railways would be very convenient. The propriety of massing the flower stands apart from the fish and meat stands is apparent. While the flowers appeal chiefly to the sentiments by their beauty, they have come to hold a large part in the home commerce of many of our large cities, and in none proportionally more than in our own capital city. At an estimated cost of about \$20,000 we are of opinion that a net revenue to the District of not less than 6 per cent could be expected. The building should be owned and controlled by the District. We recommend the proper appropriation for the purpose on the site referred to.

SUPERINTENDENT OF CHARITIES.

The Commissioners transmit herewith, also, a copy of the report of the superintendent of charities, whose office was created by a provision in the District appropriation act of August 6, 1890. The original of this report was transmitted to the Secretary of the Treasury with the Commissioners' estimates for the fiscal year to end June 30, 1893, in accordance with what they construed to be the intention of the law.

SUNDAY LAW.

In previous annual reports we have twice recommended the enactment of a law to prohibit the pursuit of ordinary secular occupations on Sunday. We believe such a law to be in the interest of public morality, health, and comfort, and hope that the desired legislation on the subject will be effected.

THE WORLD'S COLUMBIAN EXPOSITION.

In the opening paragraph of our reference to this subject in our report for last year, we recommended that "a proper appropriation be authorized and fixed by Congress," to secure a due representation of the District at the celebration in Chicago in 1892-'93 of the discovery of America, "the greatest secular event in human history and experience." It was thought better by Congress to let the matter of appropriation go over until the next session.

We have since estimated for an expenditure of \$50,000 on the part of the District, and are earnestly hopeful that Congress will authorize an appropriation of that amount to enable the District to take a creditable part in that great prospective event.

BATHING BEACH.

Through the courtesy of the War Department a bathing beach was located on the east shore of the tidal reservoir near the Washington Monument, as contemplated by the act of Congress of September 26, 1890, making an appropriation for that purpose. The Commissioners entered into contract for the construction of the beach and appurtenant conveniences, but through circumstances beyond their control the work was delayed to such an extent that the public derived but little advantage from the beach during the past season. Enough experience was obtained to justify the Commissioners in regarding this as a source of comfort, diversion, and useful instruction to a large element of our population, and in recommending that it should not only be continued but elaborated and enlarged.

POLICE COURTS.

The establishment of an additional police court has had a most salutary effect in relieving the pressure of business which had caused so much embarrassment to the single court theretofore existing as well as to the citizens and policemen summoned as witnesses, and compelled to attend its long daily sessions. The system of trials by jury in said court has proved to be highly satisfactory, with the attendant result of relieving the criminal term of the supreme court of the District of much unnecessary work which devolved upon that court under the former system.

The building now occupied by said courts does not afford sufficient space for the proper accommodation for the two courts. An appropriation should be made for remodeling said building in accordance with a plan made by the inspector of buildings.

STREET PAVEMENTS.

The pavements laid during the past year were of granite block, asphalt on bituminous base and on hydraulic base, and asphalt block. The practice of laying asphalt-sheet pavements on old cobble foundation has been pursued wherever occasion offered, and has resulted in well-wearing roadways and a considerable reduction of expense. The sheet-asphalt pavement laid on an old macadamized roadway of the city, which was mentioned in last year's report, keeps in good condition and promises to wear well.

No changes have been made in the methods of grading and regulating. The roadways, as a rule, have been covered with macadam and then with gravel, as heretofore; gutters have been laid of cobblestone, and curb put in. In the new work now being done the Telford-Macadam has been substituted for the macadam formerly used.

The use of bluestone curb has been discontinued, except where taken from streets to be permanently improved and used on streets only partially improved. In some cases curb has been given to outlying subdivisions where the owners were desirous of improving their property, this system of assistance being pursued where thought proper. Two kinds of granite curb have been used, one 6 by 20 inches, and the other 8 by 8 inches, laid on a concrete base. The latter is the handsomer of the two, and has given great satisfaction.

The nature, distribution, and cost of the various street improvements made during the past year, and the schedule of streets to be improved during the current year, are given in detail in the assistant's report.

Great care has been taken in the preparation of the schedule of streets recommended for improvements. Citizens and the citizens' associations of the city have given valuable suggestions, and the improvements recommended are distributed where, in our opinion, they will best serve the welfare of the people and forward the general prosperity of the city.

PERMIT WORK.

The appropriation for permit work is regarded as one of the most important funds at the disposal of the Commissioners. Under the permit system residents or property owners, by depositing one-half the cost in advance, can have sidewalks laid, alleys paved, and minor sewers built. Considerable work has been done in the paving of roadways with asphalt and putting in curb where the citizens voluntarily pay

one-half the cost in advance. Nearly \$60,000 worth of work was done in this way. The system results in quick work, and, in many cases, a higher grade of pavement than is usually furnished by the city.

Under the compulsory permit system improvements found to be necessary to the public health, safety, and comfort, can be ordered by the Commissioners, and one-half assessed against the abutting property. This system has proven very effective in reaching cases of filthy alleys, badly drained places, etc., recommended for improvement by the health department, which emergencies would not otherwise have been met so promptly, and in this way has contributed not a little to the general health, etc., of the city.

EXTENSION OF STREETS AND AVENUES.

The Commissioners have been placed, during the year, in an awkward position with regard to new subdivisions, from the fact that on the boundaries of the city are found old subdivisions, made as the various tastes of the owners for the time being dictated. The new subdivisions are required to conform with the general plan of the city of Washington, except where the topography renders deviation necessary. These subdivisions must be made to conform, also, to the irregular subdivisions; and to put the two together properly is, in some cases, well nigh impossible.

The owners of property along the line of Connecticut avenue extended have presented to the district this avenue from near Rock Creek to the District line. It seems proper that the omitted piece between this extension so dedicated and the city should be provided for at once.

The extension of Sixteenth street proper, from Florida avenue to Morris street, in accordance with the street plan, was provided for in the last appropriation bill. The proposed Rock Creek Park, bordering upon the proposed extension of this street, renders it expedient to provide by legislation for the extension of this street through the irregular subdivisions north of Florida avenue. Other instances of a similar character might be enumerated.

It would seem that the time had arrived when, by proper legislation, arrangements should be made for the ratification, so far as may be possible, of the older subdivisions, and the extension to the District line of the avenues and such principal streets as Sixteenth, North Capitol, and East Capitol streets. A bill with this end in view was introduced in Congress last session, but no action on it was taken by that body.

BRIDGES.

No serious damage has occurred to the bridges of the District during the past year. Repairs have been made, and bridges kept attended and in good condition. The only threatened serious damage to any bridge has been in the case of the new bridge at the foot of Pennsylvania avenue across the Eastern Branch. Some movement was observed in one of the piers, for which the Baltimore and Potomac Railroad Company is responsible, and they have given to the District a bond for \$20,000 to make good any damage.

A new bridge should be built across Rock Creek along the line of Massachusetts avenue extended, and one to replace the old bridge across the Eastern Branch, known as the Anacostia bridge. Contracts have been made and work is now going on in replacing the old Bennings bridge with a new iron structure.

PARKING COMMISSION.

The parking commission during the year continued their good work, not only in caring for the trees now on the streets of the District, but in extending the same system in the county. Their appropriations are small considering the wide territory they have to cover, and it is hoped that the slight increase asked for will be granted.

SURVEYOR'S OFFICE.

This office, supported by fees, should, in the opinion of the Commissioners, be made a salaried office, and adequate appropriations made for the care of the invaluable records now in that office. These are in danger of being worn out by continual use, not only of the searchers of titles, but in the courts. They should be indexed and most carefully preserved.

BOARD OF EXAMINERS OF STEAM ENGINEERS.

The work of this board has been satisfactory and of great value, and it is believed by the Commissioners that the work should be continued.

SURVEY OF THE DISTRICT.

The survey of the District by the United States Coast and Geodetic Survey has been finished, under the last appropriation by Congress, but has not yet been put in map form. It is hoped that some arrangements can be made for its publication.

INSPECTOR OF ASPHALTS AND CEMENTS.

Attention is invited to the report appended of the inspector of asphalts and cements. He has continued the work of inspection under these articles of use in street and sewer work, and has also been of great benefit to the District as chemist.

STEAM RAILROADS.

The steam railroad problem has not yet been solved, and the Commissioners renew their recommendations for legislation to obviate the troubles both to the people and the railroad companies themselves. Many bills have been proposed and many reports made to the Commissioners on this subject, and it is hoped that early legislation may be had.

STREET RAILWAYS.

During the past year the street railways of the city have made rapid progress in changing from the old rail to the improved grooved rail. The Washington and Georgetown Railroad Company is changing its Pennsylvania avenue and Fourteenth street lines from horse power to cable, the new tracks being paved with sheet asphalt. This greatly improves the appearance of these two highways, and also makes it better for vehicles. The tearing up of the streets incident to these improvements has caused considerable inconvenience, but the end promises to justify the means in enabling the railroad companies to furnish increased facilities and comfort of travel, and in bettering the condition of Fourteenth street and Pennsylvania avenue.

CONDEMNATION OF ALLEYS.

In a case before the supreme court of the District of Columbia it was decided that the Commissioners of the District of Columbia did not inherit the powers of the mayor of the late corporation of the city of Washington with respect to proceeding for the condemnation of ground for the purpose of opening alleys in the city. The possession of this power is so necessary for the public interests, that the Commissioners recommend the passage of legislation giving them the necessary jurisdiction in the premises, and ratifying the proceedings of this nature already taken by them and their predecessors since the revocation of the charter of the said corporation.

ROCK CREEK PARK.

The boundaries of the proposed park have been laid and condemnation of land is now progressing. Until this is insured, however, the Commissioners of the District have no control over the matter.

ROCK CREEK TUNNEL.

The Commissioners desire to renew their recommendations for the construction of a tunnel in the valley of Rock Creek between Lyons Mill and Pennsylvania avenue, as has been repeatedly recommended to Congress, and the filling in of the low portions of the grounds between the cities of Washington and Georgetown.

UNDERGROUND WIRES.

The board of electrical experts convened by act of Congress to take up and report on the subject of putting electric wires underground, have made their report, and the same is now laid before Congress. The need of an extensive increase in the electric wires of the city, and the necessity of removing same from poles on highways, needs only to be mentioned to show that early action in the matter is called for.

WIDTH OF TIRES OF VEHICLES.

It is believed that an unnecessary amount of abrasion of the surface of the asphalt pavements on the roadways of our streets is caused by the narrowness of the tires of vehicles which pass over them. While no steps have been taken to ascertain the extent of special wear due to this cause, the Commissioners are satisfied that it is sufficient to call for the making of regulations on the subject. They therefore recommend that they be given authority to make such rules in the matter as in their judgment the public interests may require. It seems especially needful that some restriction in this respect should be applied to vehicles employed in heavy traffic.

SEWAGE DISPOSAL.

The Commissioners feel it their duty to invite especial attention to the necessity for entering promptly upon the construction of an adequate system of sewage disposal. It has been thoroughly demonstrated that much valuable property in the low grounds of the city is constantly threatened with inundation from the river, while local flooding is likely

to occur in the same region from the flat grades of the existing sewers. The lower part of Rock Creek and the sewer canals are fast developing into nuisances, and the Anacostia River itself must, in a short time, show evidences of pollution from sewage.

Since the work of construction will occupy several years, the Commissioners believe that the exercise of a wise forethought requires the necessary funds to be provided without delay by the issuance of bonds, or by a loan from the United States, repayable in annual installments, with interest. The estimated cost is \$4,000,000.

It is believed that life, property, and the public health alike demand prompt action in this matter.

SEWERS.

The Commissioners have been compelled, from lack of the necessary funds, to cut down the estimate of the sewer division. The rapid extension of the built-up area, both in the city and the suburbs, renders the corresponding growth of the sewer system a necessity.

LIGHTING.

The extension of the street-lighting service has been pushed as fast as the appropriations would permit. Congress, at its last session, wisely extended the hours of gas lighting from a minimum of 2,600 hours to 3,000 hours per annum. While great advantage results from this increase, provision should be made at the earliest possible opportunity for lighting the streets all of every night, without depending upon the uncertainties of predicted moonlight. The electric-lighting service has been considerably extended, with apparent satisfaction to the public.

WATER DEPARTMENT.

The calendar year since the last report of the Commissioners has witnessed a rapid extension of the Potomac water system. Part of this extension was effected by the United States and a part by the distribution branch of the water department. The most important additions by the latter have embraced parts of Mount Pleasant and Anacostia.

A new high-service system is badly needed to serve the portions of the District lying outside of Washington. Much of the suburban area will be greatly retarded in its development, unless it can be assured of a sufficient water supply. The Commissioners have therefore included in their estimates for 1893, an item looking toward the establishment of the necessary high-service system.

The officer in charge of the Washington aqueduct has submitted estimates for sufficient funds to improve the water supply by cleaning and protecting the receiving reservoir, and by improving the distributing reservoir. The Commissioners believe this work to be important and necessary, but the funds are not now available on the part of the District.

J. W. DOUGLASS,
JOHN W. ROSS,
WM. T. ROSSELL,
Commissioners of the District of Columbia.

A.

ASSESSOR'S REPORT.

ASSESSOR'S OFFICE, DISTRICT OF COLUMBIA,
Washington, November 28, 1891.

GENTLEMEN: I have the honor to submit the following report for the fiscal year ended June 30, 1891:

Statement of the assessed value of the taxable real estate in the District of Columbia for the fiscal year ending June 30, 1892.

Washington:		
Taxable on land	\$64, 257, 934	
Taxable on improvements.....	62, 125, 650	
		\$126, 383, 584
Georgetown:		
Taxable on land	2, 698, 476	
Taxable on improvements.....	2, 984, 200	
		5, 682, 676
County:		
Taxable on land at \$1.50	6, 480, 584	
Taxable on improvements at \$1.50.....	3, 006, 150	
		9, 486, 734
Taxable on land at \$1	3, 014, 034	
Taxable on improvements at \$1	914, 250	
		3, 928, 284
Total assessed value of real estate.....		145, 481, 278
Personal property:		
Washington	11, 146, 341	
Georgetown	558, 834	
County.....	121, 015	
		11, 826, 190
Total assessed value of real and personal property in the District of Columbia on June 30, 1891.....		157, 307, 468

Amount of tax for 1891-'92.

Washington at \$1.50	\$1, 895, 753. 76
Georgetown at \$1.50	85, 240. 14
County at \$1.50.....	142, 301. 01
County at \$1	39, 282. 84
Total real-estate tax	2, 162, 577. 75
Personal tax.....	180, 366. 11
Total real and personal tax	2, 342, 943. 86

THE TRIENNIAL ASSESSMENT OF 1893.

The law of March 3, 1883, provides for the division of the District of Columbia into not exceeding twelve subdistricts, and the temporary appointment of one assessor to each subdistrict; the assessment and equalization of the entire real estate of the District to be completed in a period not exceeding one hundred and fifty days.

The hurried manner in which it was necessary to make the assessment under this plan was so obviously faulty, and resulted in so many grievous errors, that the Commissioners warmly approved my recommendation of last year for a permanent board to make all future assessments, and had a bill prepared remodeling the entire system of real-estate assessments. This bill was introduced in the last Congress, and the committees of both Houses readily appreciated the propriety of the proposed change.

On account of the unusual pressure of business at the closing days of the session, it was found impossible for the House Committee on District Affairs to get an opportunity to place the bill on its passage. The matter was considered of such pressing importance, however, that in the act of March 3, 1891, the necessary appropriation for the salaries of three assistant assessors was made, and authorizing them, under the direction of the assessor, to make the assessment for the triennial period beginning with the fiscal year 1893, under the provisions of the act of March 3, 1883, and to perform certain other duties specifically assigned to them by the assessor.

On the 1st day of July last, three citizens of this District, of recognized ability, were appointed to these positions, and since their appointment these gentlemen have been busily engaged in the preliminary work connected with their important duties.

When it is remembered that the entire real estate of the District is to be assessed from "personal view" and finally completed, including the "equalization," on or before the first Monday of August next, it will be seen that it will require close and continued application to make a satisfactory assessment within the time specified. All possible conveniences have been furnished for a successful prosecution of the work, with the view of having the assessment completed at the time now provided by law.

It is a matter of extreme importance to the taxpayers that the assessment of 1893 shall be a success, and when it is finally completed I trust that the Commissioners and our citizens generally will have just cause for congratulation that the old system has passed away and the new one successfully inaugurated.

CHURCH PROPERTY.

During the past year my attention has been called to one feature connected with the exemption of church property which appears to me requires attention.

The act of June 21, 1879 (21 Stat., p. 23), exempts property "actually held and used for the purpose of divine worship."

It appears that some of our churches are being rented for various kinds of secular entertainments, from which a large revenue is derived, but, because the building is also used for "divine worship" it is exempt from taxation. A new business structure is now in process of erection, to be used for musical, literary, and other entertainments, holding conventions, etc., which will be subject to taxation, and the owners will of course have to compete with all other persons who may invest their money in similar enterprises. It is not fair that the owners of this last mentioned property should also be compelled to compete with churches that are doing the same kind of business, without having to bear any of the expenses of the Government, and who can therefore under rent any tax-paying competitor.

I think that the law should be so amended as to confine the exemption

of church property to that actually held and used exclusively for the purpose of divine worship.

COUNTY PLAT BOOKS.

Under the provisions of the act approved January 24, 1891, an appropriation of \$5,000 was made and the Commissioners authorized to provide this office with plats or maps of all subdivisions of land in this District outside the cities of Washington and Georgetown. As soon after the passage of the act as practicable, a contract was entered into with a practical surveyor and a gentleman of large experience in this class of work.

Necessarily there is a great amount of labor involved in the preparation of these books, but I am assured by the contractor that every effort, consistent with absolute accuracy, is being made to expedite the work. I am in hopes that the plats will be completed in time to be of material service to the assistant assessors, so soon as they are ready to commence the assessment of county property.

PERSONAL PROPERTY TAX.

In my last annual report I submitted certain facts connected with the personal property assessment, showing a noticeable diminution in this tax between the years 1878 and 1890. The present year is substantially a repetition of the last eight or ten years, the small increase in the tax coming principally from new corporations that are being annually organized under our District laws.

The old tax ledgers contain a large number of unpaid accounts upon which nothing can ever be realized, for the reason that many of the delinquents have left the District, some have died and their property has been distributed, others have failed in business, etc. When these facts become known the accounts should be canceled and the collector relieved of any further responsibility for their collection.

The law on this subject is unquestionably an extremely unpopular one, and many of our best citizens complain grievously at its strict enforcement. They call it "inquisitorial," "iniquitous," "unjust," etc., and that its longer continuance will have a tendency to drive capital out of the District for investment elsewhere.

I am constrained to believe that these objections are well founded and are not at all unreasonable. The entire revenue derived from the personal tax averages only about \$150,000 annually. I think the law should be repealed and a general graded license law substituted therefor, from which, in my judgment, much more money would be realized, and at the same time the burden of taxation would be distributed more equitably and satisfactorily.

TAX CERTIFICATES.

The act of February 6, 1879, requires the collector of taxes, whenever called upon, to furnish a certified statement over his hand and official seal of all taxes and assessments, general and special, that may be due and unpaid at the time of making said certificate.

In the preparation of these certificates the principal portion of the work is done in this office, the collector having none of the data under his charge or supervision. The latter officer is therefore required to attach his official signature to a document for the correctness of which he has to rely on the clerical force of another office. The collector and

myself have consulted on the subject, and each has agreed to recommend that the law be so amended as to require the assessor to furnish the certificate. This change would relieve the collector of considerable annoyance and at the same time would make no material increase of work for this office. It would also considerably lessen the time which it takes to get a certificate issued to the party desiring it, as the time now occupied in sending these documents to the collector and awaiting his pro forma signature would be done away with.

During the past year six thousand six hundred applications for certificates were filed in this office, and that number were prepared and issued, necessitating the handling and examination of an average of thirty tax ledgers for each certificate. This work alone takes almost the entire time of the assistant assessor in charge of that branch and two clerks.

It is a matter of great importance that this work should be carefully done, and as expeditiously as is consistent with absolute correctness. A marked improvement is noticed in this work during the past year, but any change that will shorten the time from the filing of the application to the final issue of the certificate is desirable, and hence I am in full accord with the proposition that the law be amended as heretofore suggested.

ARREARS OF TAXES.

Quite a number of orders have lately been issued by the Commissioners to cancel taxes due and unpaid prior to the date of sale of the property.

These orders, as I understand it, are based on decisions of the Supreme Court of this District in the Brewer and Pillings cases, and to which attention was called in my last annual report, urging Congressional action in order to avert a serious reduction in the amount of taxes due and payable to the District. These cancellations have relieved the owners of property of a very large proportion of their taxes, amounting during the past year alone to several thousand dollars. As the full force and effect of the ruling in this matter is becoming better known, we find that many are taking advantage of it, and instead of paying their taxes promptly, are letting the various payments go by default, looking forward to the fact that each year as it passes with the taxes unpaid adds an additional reason why all the years that have been in default should be canceled, and an additional burden of expense placed upon the prompt taxpayer to make up for the deficiencies caused by these orders of cancellation.

Under the present system the property is advertised for sale for only one year of arrears and is never readvertised for the same year. I think the law should be so amended as to require the purchaser at the tax sale to pay all arrears before securing a deed from the Commissioners for the property sold.

The work of preparing books showing the arrears of taxes due to June 30, 1890, is steadily progressing, five clerks being employed cul-ling from the tax ledgers the unpaid accounts, and it is expected that this work will be completed up to the above-mentioned date during the present fiscal year. The entire list of arrears could then be advertised for sale as heretofore suggested.

ADDITIONAL CLERICAL FORCE.

The work of this office is so perceptibly increasing each year that it is becoming impossible to keep the current work up to date without additional clerical assistance.

The same subject has been annually brought to the attention of the Commissioners for several years past, but although the work to be done has about doubled in the last ten years, no material increase in the clerical force has been made. In 1871 the entire tax accounts for the cities of Washington, Georgetown, and the County were carried in five tax ledgers, and the number of transfers of property amounted to only a few hundred. For the present fiscal year it takes seventeen ledgers of 350 folios each to carry the accounts, and an average of 6,500 transfers of property are now made annually. The number of accounts for the same period has increased from 13,512 to 26,954, being 24,375 persons that now pay taxes on realty and 2,579 that pay on personal property.

In the last few years there has been an unusual growth in the subdivision and improvement of suburban property. The "old farm" that took but one entry to carry it on our records, and but one bill to show the account, is now a prosperous subdivision with hundreds of owners. Each additional owner is a duplication of the work which is necessary to be done in this office over and above that which was required for the original farm.

There is no need to urge the great importance of having trusty and experienced employes in this branch of the District service, and providing adequate compensation for their duties. In this connection I invite attention to my estimate of expenses submitted under date of September 23, wherein request is made for a few additional clerkships and an increase of salary for some others, which I trust will meet with the approval of the Commissioners.

LICENSES.

The receipts from licenses show an increase, notwithstanding the fact that the District early in the license year was enjoined from collecting revenue for the sale of liquors within a considerable area of territory. The subject of a proper regulation of this traffic always has and ever must command the earnest attention of all good citizens. During the year 650 barroom and 434 wholesale licenses were issued, showing a decrease of 43 barroom and 31 wholesale licenses.

The act of Congress above referred to was approved on the 28th day of February, 1891, and is as follows, viz:

AN ACT to prohibit the granting of liquor licenses within one mile of the Soldiers Home.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That on and after the passage of this act no license for the sale of intoxicating liquors at any place within one mile of the Soldiers' Home property in the District of Columbia shall be granted.

This law, while known to have passed the Lower House December 8, 1890, attracted little attention until its final passage and approval by the President. Its requirements were promptly enforced by the Commissioners, and, although a number of licenses were awaiting delivery, none were thereafter granted or issued within the limits prescribed by the law. Its passage legislated out of business forty-two retail and thirty-three wholesale dealers. Of this number the proprietors of fifteen barrooms were in possession of their licenses when the law was passed. These have now expired and, as a matter of course, can not be renewed. Parties affected by this law demurred to the construction of the authorities as to the area of territory covered, claiming the law should be construed to mean 1 mile from the Soldiers' Home property by the nearest

traveled highway. This question was referred to the attorney for the District of Columbia, who promptly decided that the law as passed meant that no license should be issued for any place located within 1 mile of any portion of the Soldiers' Home property in a straight line. This view was adopted. The lines of prohibition enter the city limits immediately south of Florida avenue, on First street west, thence southwest to New Jersey avenue and Q street, thence northwest striking Seventh street and Rhode Island avenue, and Fourteenth and V streets NW., and out into the county. Briefly, beginning on the north this side of Brightwood, it is bounded on the east by Sixteenth street east extended, south by Seventh street and Rhode Island avenue, west by Sixteenth street west extended.

Before the beginning of the current license year this department was furnished by the Commissioners with new liquor-license rules and regulations for public distribution. The total number of licenses issued during the year just ended was 3,529, besides 427 certificates to the collector for miscellaneous receipts. The amount collected was \$158,200.57. This amount is credited to the various sources hereto appended, viz:

Receipts from licenses, year ended June 30, 1891.

	Total.	Increase.	Decrease.
Apothecaries.....	\$570.36		\$17.01
Auctioneers.....	1,424.82		65.92
Brokers.....	100.00		
Banks and bankers.....	442.42		198.92
Barrooms.....	75,836.93		3,218.57
Brewers.....	125.00		
Bill posters.....	20.00		
Billiard and other tables, etc.....	2,336.44		2.00
Cattle brokers.....	483.35		43.32
Commission merchants.....	2,355.87		.82
Dealers in ice.....	164.00	40.00	
Dealers in liquors (wholesale).....	10,378.01		824.17
Dealers in junk.....	2,553.51	1,323.49	
Dealers in old barrels.....	80.00		20.00
Entertainments, circuses, balls, etc.....	2,200.00	620.00	
Hacks, cabs, and vehicles.....	3,390.41	51.64	
Hotels.....	3,948.93	302.25	
Intelligence offices.....	80.01		20.83
Insurance companies and agents.....	13,787.39	1,712.84	
Livery stables.....	3,529.60		88.17
Manufacturers of illuminating gas.....	1,072.00		
Peddlers.....	1,270.94	558.39	
Pawnbrokers.....	600.00	500.00	
Produce dealers at large.....	8,971.77	88.50	
Produce dealers in markets.....	4,620.01		311.28
Restaurants.....	6,817.22	1,604.60	
Real-estate agents.....	10,341.58	991.37	
Theaters.....	700.00		66.68
Variety theaters.....			500.00
Total.....	158,200.57	7,793.08	5,377.69

Receipts from licenses, 1890-'91.....	\$158,200.57
Receipts from licenses, 1889-'90.....	155,785.18
Total increase.....	2,415.39
Total increase 1890-'91.....	7,793.08
Total decrease 1890-'91.....	5,377.69
Net increase.....	2,415.39

REVENUE.

A comparison of the increase and decrease of revenue derived from various sources will serve to illustrate facts which have from time to time been referred to in reports from this office calling attention to the

necessity of new legislation to equalize and perfect a license system, which, as before stated, I believe properly and judiciously administered, is capable of producing a revenue of half a million dollars without imposing additional burdens of taxation upon those who now pay. The collection of personal taxes is confined to comparatively few, while the majority escape altogether because the license laws do not include them. From time to time the District is the sufferer financially by decisions of the courts in the construction of the license laws. A careful revision should remedy this. The revenue from the markets is steadily decreasing, owing partially to this and partly to the fact that the dealer outside pays nothing, while those inside are taxed. The same condition of inequality extends throughout the entire list of trades and professions taxed in this District.

BANKS AND FINANCIAL INSTITUTIONS.

The receipts from these institutions are steadily decreasing, although the prosperity of our city is indicated by their constantly increasing number and the elegance and beauty of their financial homes. Congress on the 1st day of October, 1890, passed a law prescribing a tax on loan and trust companies, in lieu of personal taxes, and this office in due course of business made demand upon them for the payment of a tax as bankers under the requirements of the license laws. This had heretofore been paid in addition to the personal tax for which the present law was substituted. The companies demurred, and claimed that Congress intended by the passage of the act to include both personal and license taxes, although it was not so expressed. This view, upon being referred to the attorney for the District, was sustained by him and approved.

In connection with the revision of our license laws, I beg to say that for over twelve years the license tax on the cars of the various street railway lines, with three exceptions, have not been paid. The cases were prosecuted in the police and criminal courts with an adverse decision, from which, I believe, the District made no appeal. The conditions or requirements of existing law in reference to horses as the motive power are rapidly being nullified by the modern systems of cables and electricity. In view of this fact, new legislation should either meet the new state of affairs or abolish the old.

PAWNBROKERS, JUNK DEALERS, AND DEALERS IN SECONDHAND PERSONAL PROPERTY.

On the 3d day of March, 1891, an act of Congress was approved licensing and regulating those engaged in these branches of business, a portion of which legislation was in the nature of amendments to existing law. This act was wider in its scope and necessarily embraced a greater number of dealers than heretofore. The increased receipts are apparent. Nevertheless, like all new legislation, some opposition was at once encountered, and shortly after its passage this office was compelled to appeal to the courts, who promptly sustained the law. Nevertheless, a condition of affairs was developed which seems to show the need of still further amendment. The individual collector of old material is presumably as liable as the proprietor of a storage depot for its reception, and until the wording of the act is more explicit it must remain a source of annoyance to those charged with its enforcement.

The issue of engineer licenses charged upon this office over a year ago is increasing in number. The labor, while not great, contributes

traveled highway. This question was referred to the attorney for the District of Columbia, who promptly decided that the law as passed meant that no license should be issued for any place located within 1 mile of any portion of the Soldiers' Home property in a straight line. This view was adopted. The lines of prohibition enter the city limits immediately south of Florida avenue, on First street west, thence southwest to New Jersey avenue and Q street, thence northwest striking Seventh street and Rhode Island avenue, and Fourteenth and V streets NW., and out into the county. Briefly, beginning on the north this side of Brightwood, it is bounded on the east by Sixteenth street east extended, south by Seventh street and Rhode Island avenue, west by Sixteenth street west extended.

Before the beginning of the current license year this department was furnished by the Commissioners with new liquor-license rules and regulations for public distribution. The total number of licenses issued during the year just ended was 3,529, besides 427 certificates to the collector for miscellaneous receipts. The amount collected was \$158,200.57. This amount is credited to the various sources hereto appended, viz:

Receipts from licenses, year ended June 30, 1891.

	Total.	Increase.	Decrease.
Apothecaries.....	\$570.36		\$17.01
Auctioneers.....	1,424.82		65.92
Brokers.....	100.00		
Banks and bankers.....	412.42		198.92
Barrooms.....	75,836.93		3,218.57
Brewers.....	125.00		
Bill posters.....	20.00		
Billiard and other tables, etc.....	2,336.44		2.00
Cattle brokers.....	483.35		43.32
Commission merchants.....	2,355.87		.82
Dealers in ice.....	164.00	40.00	
Dealers in liquors (wholesale).....	10,378.01		824.17
Dealers in junk.....	2,553.51	1,323.49	
Dealers in old barrels.....	80.00		20.00
Entertainments, circuses, balls, etc.....	2,200.00	620.00	
Hacks, cabs, and vehicles.....	3,390.41	51.64	
Hotels.....	3,948.93	302.25	
Intelligence offices.....	80.01		20.83
Insurance companies and agents.....	13,787.39	1,712.84	
Livery stables.....	3,529.60		88.17
Manufacturers of illuminating gas.....	1,072.00		
Peddlers.....	1,270.94	558.39	
Pawnbrokers.....	600.00	500.00	
Produce dealers at large.....	8,971.77	88.50	
Produce dealers in markets.....	4,620.01		311.28
Restaurants.....	6,817.22	1,604.60	
Real-estate agents.....	10,341.58	991.37	
Theaters.....	700.00		66.68
Variety theaters.....			500.00
Total.....	158,200.57	7,793.08	5,377.69

Receipts from licenses, 1890-'91.....	\$158,200.57
Receipts from licenses, 1889-'90.....	155,785.18
Total increase.....	2,415.39
Total increase 1890-'91.....	7,793.08
Total decrease 1890-'91.....	5,377.69
Net increase.....	2,415.39

REVENUE.

A comparison of the increase and decrease of revenue derived from various sources will serve to illustrate facts which have from time to time been referred to in reports from this office calling attention to the

necessity of new legislation to equalize and perfect a license system, which, as before stated, I believe properly and judiciously administered, is capable of producing a revenue of half a million dollars without imposing additional burdens of taxation upon those who now pay. The collection of personal taxes is confined to comparatively few, while the majority escape altogether because the license laws do not include them. From time to time the District is the sufferer financially by decisions of the courts in the construction of the license laws. A careful revision should remedy this. The revenue from the markets is steadily decreasing, owing partially to this and partly to the fact that the dealer outside pays nothing, while those inside are taxed. The same condition of inequality extends throughout the entire list of trades and professions taxed in this District.

BANKS AND FINANCIAL INSTITUTIONS.

The receipts from these institutions are steadily decreasing, although the prosperity of our city is indicated by their constantly increasing number and the elegance and beauty of their financial homes. Congress on the 1st day of October, 1890, passed a law prescribing a tax on loan and trust companies, in lieu of personal taxes, and this office in due course of business made demand upon them for the payment of a tax as bankers under the requirements of the license laws. This had heretofore been paid in addition to the personal tax for which the present law was substituted. The companies demurred, and claimed that Congress intended by the passage of the act to include both personal and license taxes, although it was not so expressed. This view, upon being referred to the attorney for the District, was sustained by him and approved.

In connection with the revision of our license laws, I beg to say that for over twelve years the license tax on the cars of the various street railway lines, with three exceptions, have not been paid. The cases were prosecuted in the police and criminal courts with an adverse decision, from which, I believe, the District made no appeal. The conditions or requirements of existing law in reference to horses as the motive power are rapidly being nullified by the modern systems of cables and electricity. In view of this fact, new legislation should either meet the new state of affairs or abolish the old.

PAWNBROKERS, JUNK DEALERS, AND DEALERS IN SECONDHAND PERSONAL PROPERTY.

On the 3d day of March, 1891, an act of Congress was approved licensing and regulating those engaged in these branches of business, a portion of which legislation was in the nature of amendments to existing law. This act was wider in its scope and necessarily embraced a greater number of dealers than heretofore. The increased receipts are apparent. Nevertheless, like all new legislation, some opposition was at once encountered, and shortly after its passage this office was compelled to appeal to the courts, who promptly sustained the law. Nevertheless, a condition of affairs was developed which seems to show the need of still further amendment. The individual collector of old material is presumably as liable as the proprietor of a storage depot for its reception, and until the wording of the act is more explicit it must remain a source of annoyance to those charged with its enforcement.

The issue of engineer licenses charged upon this office over a year ago is increasing in number. The labor, while not great, contributes

its quota to the immense burden of labor imposed upon this branch of the office.

Since my last report the issue of permits for religious and charitable organizations has also been delegated to this office. The duty of discrimination and judgment as to the merits of claims thus presented is a greater burden than the labor involved, which is considerable. It interferes greatly with the current work, and the time is not far distant when regular rules for their issue must be adopted.

HACKS, CABS, AND PUBLIC VEHICLES.

Five hundred and forty-eight public vehicles have been licensed the past year, divided into the following classes: Hacks and omnibuses, 119; one-horse cabs, coupés, and carriages, 381; besides 48 herdies and carettes running upon regular routes. The growth of the city is indicated by the increased number, notwithstanding the rapid extension of our street railway systems. This office has before called attention to a need of the revision of the rates provided by the hack laws, or at least a codification of them, so that they can be understood. I earnestly renew the recommendation. These rates are required to be posted in each vehicle, but the citizen or stranger having occasion to consult them receives little satisfaction. The disgust of the passengers is indicated by the fact that the cards are torn up or thrown away and have to be replaced every few days at the District expense. The coming year will bring to our doors thousands of visitors who will avail themselves of licensed vehicles. Their number will be greatly increased, and the stranger should know at a glance what his charges for fare should be without reference to an officer to interpret them or settle a dispute.

FLYING HORSES, MERRY-GO-ROUNDS, ETC.

During the last year the accumulated dissatisfaction and a long period of suffering on the part of some of our citizens culminated in an order of the Commissioners that virtually prohibits the issue of a license to this class of amusements in the city limits, except under conditions practically unattainable. The community can well spare them, as the gatherings attracted thereby became a source of annoyance and complaint.

RESTAURANTS AND EATING HOUSES.

The number of licensed eating houses in the District of Columbia, exclusive of hotels, is 279. There has been an increase of revenue from this source. Nevertheless, the amount of the tax is excessive and should either be reduced or graded.

INSURANCE COMPANIES.

Two hundred insurance companies were licensed to do business in the District of Columbia during the year. This list includes—

Outside companies:	
Fire	121
Life	44
Life and accident, etc.	14
	— 179
District companies:	
Fire	14
Life	6
Accident	1
	— 21
Total	200

The names and locations of these companies are as follows:

FIRE INSURANCE COMPANIES.

Name of company.	Home office.	Name of company.	Home office.
Albany Fire Insurance Co.	Albany, N. Y.	Insurance Co. of North America.	Philadelphia.
American Fire Insurance Co.	Newark, N. J.	Imperial Insurance Co.	London, England.
American Fire Insurance Co.	Baltimore, Md.	Jersey City Fire Insurance Co.	Jersey City, N. J.
American Fire Insurance Co.	New York.	Knoxville Fire Insurance Co.	Knoxville, Tenn.
American Fire Insurance Co.	Philadelphia.	Liverpool and London and Globe Insurance Co.	England.
American Liability Insurance Co.	Jersey City, N. J.	Lion Insurance	London, England.
American Central Insurance Co.	St. Louis, Mo.	Liberty Insurance Co.	New York.
Agricultural Insurance Co.	Watertown, N. Y.	London Assurance Corporation.	London, England.
Anglo-Nevada Ass'e Corporation.	San Francisco, Cal.	Lancashire Insurance Co. ..	England
Alliance Insurance Association.	New York.	London and Lancashire Insurance Co.	Do.
Buffalo German Insurance Co.	Buffalo, N. Y.	Meriden Fire Insurance Co.	Meriden, Conn.
British American Association.	Toronto, Canada.	Mount Vernon Fire Insurance Co.	Alexandria, Va.
Boylston Insurance Co.	Boston, Mass.	Mercantile Fire and Marine Insurance Co.	Boston, Mass.
City of London Fire Insurance Co.	London, England.	Merchants' Insurance Co. ..	Newark, N. J.
Connecticut Fire Insurance Co.	Hartford, Conn.	Maryland Fire Insurance Co.	Baltimore, Md.
Continental Insurance Co. ..	New York.	Merchants Insurance Co. ...	Providence, R. I.
Commercial Insurance Co. ..	San Francisco, Cal.	Mutual Fire Insurance Co.	Montgomery Co., Md.
California Fire Insurance Co.	Do.		New Orleans, La.
Citizens' Insurance Co.	New York.	Mechanics and Traders Insurance Co.	Baltimore.
Commercial Indemnity Association.	Waterbury, Conn.	Merchants and Mechanics' Insurance and Savings Co.	
Commercial Alliance Insurance Co.	New York.	Manufacturers and Builders' Insurance Co.	New York.
Commercial Union Ass'e Co.	England.	Mechanics' Insurance Co. ..	Philadelphia.
Dwelling House Insurance Co.	Boston, Mass.	Manchester Fire Insurance Co.	England.
Delaware Insurance Co.	Philadelphia, Pa.	North British and Mercantile Insurance Co.	England.
Equitable Insurance Co. ...	Providence, R. I.	Niagara Fire Insurance Co.	New York.
Eliot Insurance Co.	Boston, Mass.	National Fire Insurance Co.	Allegheny, Pa.
Eagle Fire Insurance Co. ...	New York.	North American Fire Insurance Co.	Boston, Mass.
Etna Insurance Co.	Hartford, Conn.	National Fire Insurance Co.	Hartford, Conn.
Farmers' Fire Insurance Co.	York, Pa.	Northwestern National Insurance Co.	Milwaukee, Wis.
Franklin Fire Insurance Co.	Philadelphia.	National Insurance Co.	New York.
Farragut Fire Insurance Co.	New York.	New Hampshire Fire	Manchester, N. H.
Firemen's Insurance Co. ...	Baltimore, Md.	National Fire Insurance Co.	Baltimore, Md.
Firemen's Insurance Co. ...	Newark, N. J.	Norwich Union Assurance Society.	England.
Firemen's Fund Insurance Co.	San Francisco, Cal.	Northern Assurance Co.	Do.
Fire Association.	Philadelphia, Pa.	North American Insurance Co.	Philadelphia.
Fire Insurance Co. of the County of Philadelphia.	Do.	New York Fire Insurance Co.	New York.
Fidelity Fire Insurance Co.	Huron, S. Dak.	New York Bowery Fire Insurance Co.	Do.
Glens Falls Fire Insurance Co.	Glens Falls, N. Y.	Orient Insurance Co.	Hartford, Conn.
Girard Fire and Marine Insurance Co.	Philadelphia.	Phoenix Assurance Co.	London, England.
German-American Fire Insurance Co.	New York.	People's Fire Insurance Co.	Manchester, N. H.
Germania Fire Insurance Co.	Do.	Phoenix Fire Insurance Co.	Hartford, Conn.
Georgia Home Fire Insurance Co.	Columbus, Ga.	Phenix Fire Insurance Co.	New York.
Guardian Fire Ass'e Co.	London, England.	People's Fire Insurance Co.	Do.
German Fire Insurance Co.	Baltimore.	Peabody Fire Insurance Co.	Baltimore, Md.
Howard Fire Insurance Co.	Baltimore, Md.	Providence Washington Insurance Co.	Providence, R. I.
Hanover Fire Insurance Co.	New York.	Pennsylvania Fire Insurance Co.	Philadelphia, Pa.
Hartford Fire Insurance Co.	Hartford, Conn.	Potomac Fire Insurance Co.	Baltimore, Md.
Hamburg-Bremen Fire Insurance Co.	Hamburg, Germany.	Queen Insurance Co.	Liverpool, England.
Home Insurance Co.	New York.	Royal Fire Insurance Co. ...	Do.
Home Fire Insurance Co. ...	Baltimore, Md.	Reading Fire Insurance Co.	Reading, Pa.
		Reliance Fire Insurance Co.	Philadelphia, Pa.
		Rochester German Fire Insurance Co.	Rochester, N. Y.
		St. Paul Fire and Marine Insurance Co.	St. Paul, Minn.

FIRE INSURANCE COMPANIES—Continued.

Name of company.	Home office.	Name of company.	Home office.
Sun Fire Office.....	London, England.	Union Fire Insurance Co ..	San Francisco, Cal.
Security Insurance Co.....	New Haven, Conn.	Union Fire Insurance Co ..	Philadelphia, Pa.
Scottish Union and National Insurance Co.	Scotland.	United Firemen's Insurance Co.	Do.
Springfield Fire and Marine Insurance Co.	Springfield, Mass.	Union Assurance Co.....	London, England.
Teutonia Fire Insurance Co.	Philadelphia.	Virginia Fire and Marine Insurance Co.	Richmond, Va.
Transatlantic Fire Insurance Co.	Hamburg, Germany.	Western Insurance Co.....	Pittsburg, Pa.
The Insurance Co. of the State of Pennsylvania.	Philadelphia.	Western Assurance Co.....	Toronto, Canada.
The Fire Insurance Co. of the County of Philadelphia.	Do.	Williamsburg City Fire Insurance Co.	New York.
		Westchester Fire Insurance Co.	Do.

LIFE INSURANCE COMPANIES.

Brooklyn Life Insurance Co.	Brooklyn, N. Y.	Mutual Reserve Fund Life Insurance Co.	New York.
Berkshire Life Insurance Co.	Pittsfield, Mass.	Massachusetts Benefit Association.	Boston, Mass.
Bay State Beneficiary Association.	Westfield, Mass.	Massachusetts Mutual Life Insurance Co.	Springfield.
Baltimore Mutual Aid Society.	Baltimore, Md.	National Mutual Aid Society of Virginia.	Alexandria.
Connecticut Mutual Life Insurance Co.	Hartford, Conn.	Northwestern Mutual Life Insurance Co.	Milwaukee, Wis.
Commercial Alliance Life Insurance Co.	New York.	New York Life Insurance Co.	New York.
Eureka Mutual Aid Society	Baltimore, Md.	National Alliance.....	Do.
Etna Life Insurance Co....	Hartford, Conn.	New England Mutual Life Insurance Co.	Boston.
Equitable Life Assurance Society of the United States of America.	New York.	National Life Insurance Co.	Montpelier, Vt.
Employers' Liability Ass'e Corporation.	London, England.	National Life Association..	Hartford, Conn.
Germania Life Insurance Co.	New York.	Provident Life Association.	Baltimore, Md.
Home Life Insurance Co...	Do.	Prudential Insurance Company of America.	Newark, N. J.
Hartford Steam Boiler Inspection and Insurance Co.	Hartford, Conn.	Phoenix Mutual Life Insurance Co.	Hartford, Conn.
Howard Aid Association...	Indianapolis, Ind.	Provident Savings Life Ass'e Society.	New York.
Keystone Mutual Benefit Association.	Allentown, Pa.	Penn Mutual Life Insurance Co.	Philadelphia.
Mutual Aid Society of Baltimore.	Baltimore, Md.	Provident Life and Trust Co.	Do.
Mutual Life Insurance Co.	New York.	State Mutual Life Ass'e Co.	Worcester, Mass.
Metropolitan Life Insurance Co.	Do.	Travelers' Life and Accident Insurance Co.	Hartford.
Michigan Mutual Life Insurance Co.	Detroit.	The Life Insurance Company of Virginia.	Richmond.
Manhattan Life Insurance Co.	New York.	Union Central Life Insurance Co.	Cincinnati.
Mutual Benefit Life Insurance Co.	Newark, N. J.	United Brethren Mutual Aid Society.	Lebanon, Pa.
Maryland Life Insurance Co.	Baltimore.	Washington Life Insurance Co.	New York.

LIFE AND ACCIDENT COMPANIES.

American Accident Indemnity Association.	New York.	Metropolitan Plate Glass Insurance Co.	New York.
American Accident Insurance Co.	Louisville, Ky.	Manufacturers' Accident Indemnity Co.	Geneva, N. Y.
American Casualty Insurance and Security Co.	Baltimore.	Mercantile Mutual Accident Society.	New York.
Bankers and Traders' Accident Association.	New York.	New York Accident Insurance Co.	Do.
Fidelity and Casualty Co.	Do.	New England Mutual Accident Association.	Boston.
Lloyd's Plate Glass Insurance Co.	Do.	Preferred Mutual Accident Association.	New York.
Mercantile Mutual Accident Association.	Boston.	Travelers' Insurance Co...	Hartford, Conn.

DISTRICT INSURANCE COMPANIES.

Fire.

Arlington Fire Insurance Co.
 Corcoran Fire Insurance Co.
 Columbia Fire Insurance Co.
 Commercial Fire Insurance Co.
 Firemen's Insurance Co.
 Franklin Insurance Co.
 German-American Fire Insurance Co.
 Lincoln Fire Insurance Co.
 Mutual Protection Fire Insurance.
 National Union Fire Insurance Co.
 National Metropolitan Fire Insurance Co.
 Potomac Insurance Co.
 People's Fire Insurance Co.
 Riggs Fire Insurance Co.

Life.

Equitable Endowment Association.
 National Life and Maturity Association.
 National Life Insurance Company of the United States of America.
 National Capital Life Association.
 Washington Beneficial Endowment Association.
 United States Capital Life Insurance Co.

Accident.

Home Plate Glass Insurance Co.

The size and number of the companies located here as the nation's guests, as well as those at home, is an evidence of their claim for proper protection. No business enterprise can succeed thoroughly whose foundations are continually sapped by fraudulent or illegitimate competition. The public is entitled to the protection of such laws as will accomplish these results and prevent fraudulent insurance. I am led to these remarks because of the insufficiency of legislation now governing this important branch. This recommendation is not new; it has been urged by this office for several years, and its need was never more apparent than now. As an illustration of this fact, I will state that within a month we have been in receipt of inquiries as to the financial standing of the Chesapeake Insurance Company, with the statement that policies of that company (said to be located here) had been offered. As a matter of fact this organization died for the good of the public several years ago, and any person offering its risks or that of other companies of like character should be promptly prosecuted. It is believed that other similar organizations are and have been sending circulars over the country soliciting insurance who have failed to secure the authority required by law, and persist in doing business (through the mails at least) despite that fact. The leading States have wise and stringent insurance laws, and this District should have the same. No elaborate machinery is required, but it should be in the power of the authorities to take a fraudulent company into court, and fine and drive them from this territory.

The laws covering fire insurance are defective, but those protecting life are more so. Assessment companies are required to have no capital, so that the only guaranty of the policy holder is the personal integrity of the incorporators or stockholders. I know of nothing affecting public confidence or security more important than this. The culmination of many years' payments is ordinarily only reached at death. The laws should see that a contract so maturing should be promptly met and satisfied. I believe that any company should be able to satisfy the authorities that they are able and willing to satisfy every obligation. To this end ample security should be pledged to the Government.

It has been noticed that the formation of lodges, councils, fraternal societies, and beneficial organizations are on the increase within this territory. Many of them are not local, but come here from abroad and establish branches. Where such organizations solicit insurance business from the public, thereby entering into competition with other companies, they should be subject to the same rules and requirements of law. They pay no tax.

COMMISSION MERCHANTS.

I take occasion earnestly to renew the recommendation of this office that the reputable dealers in this business be better protected from dishonest competition. Large consignments of merchandise are made, and at present the consignor has to rely solely on the business integrity of the consignee. Breaches of trust are rare, but now and then the community is startled by some flagrant case, from which there is no redress.

HOTELS AND BOARDING HOUSES.

During the year 77 licenses were issued for hotels. I again renew my recommendation of last year, that boarding and lodging houses be required to register by the payment of a nominal fee. By this means the location and capacity of every house for public entertainment in the District would be a matter of record, and available for the use of those having charge on public occasions.

In conclusion, I beg to say that the employes of this office have shown marked efficiency, and have given general satisfaction in the performance of their various duties during the past year.

I consider myself particularly fortunate in having two assistants who, from long-continued practical experience, have become thoroughly familiar with all the intricate details of the official records, and at the same time are gentlemen with whom it gives me pleasure to counsel and advise in all matters pertaining to our official duties.

The office is also to be congratulated in having a license clerk who, from careful and intelligent study, personal merit, and a conscientious discharge of duty, has justly earned the confidence and respect of the public.

My thanks are due and are hereby tendered to the Commissioners for many acts of personal and official courtesies during the past year.

Very respectfully,

MATTHEW TRIMBLE,
Assessor of the District of Columbia.

THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

APPENDIX A.

OFFICE OF THE ASSESSOR, DISTRICT OF COLUMBIA,
Washington, September 23, 1891.

GENTLEMEN: I have the honor to submit herewith an estimate of the amount required for the proper support of this office for the fiscal year ending June 30, 1893:

Assessor		\$3, 000
Assessment division:		
3 assistant assessors, at \$2,500	\$7, 500	
2 assistant assessors, at \$1,800	3, 600	
1 special assessment clerk	1, 700	
3 clerks, at \$1,400	4, 200	
5 clerks, at \$1,200	6, 000	
3 clerks, at \$1,000	3, 000	
1 draftsman	1, 400	
		27, 400
		30, 004

License division:		
1 license clerk	\$1,400	
1 assistant license clerk	1,000	
1 inspector of licenses	1,200	
1 assistant inspector of licenses	1,000	
		\$4,600
1 messenger	600	
Contingent expenses	2,000	
		2,600
Total		37,600

The foregoing estimate provides for three clerks now carried in the appropriation for the collector's office, two of them at \$1,400 each and one at \$1,200. These clerks have always been employed exclusively in the assessor's office. The transfer, as suggested, would decrease the appropriation for the collector's office in the amount of \$4,000, and was approved by the Commissioners last year.

I have asked for a small advance in some of the salaries now provided by law, and an increase of the clerical force, necessarily required by the fast and constant increasing work of the office.

Very respectfully,

MATTHEW TRIMBLE,
Assessor, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

APPENDIX B.

Value of personal property in the District of Columbia assessed for taxation from 1877 to June 30, 1892.

Year.	Assessed value.	Year.	Assessed value.
1877.....	\$15,429,873.00	1885.....	\$12,795,934.00
1878.....	17,239,051.00	1886.....	12,658,949.00
1879.....	13,336,920.00	1887.....	11,934,245.00
1880.....	11,421,431.00	1888.....	10,943,458.00
1881.....	10,895,712.00	1889.....	11,728,672.00
1882.....	9,666,272.00	1890.....	11,023,167.00
1883.....	9,028,812.00	1891.....	11,697,650.00
1884.....	11,311,622.00	1892.....	11,826,190.00

Value of real property in the District of Columbia as assessed for taxation from 1871 to 1892, inclusive.

Year.	Washington.	Georgetown.	County.	Total.
1871.....	\$66,818,880	\$6,213,467	\$0,965,101	\$79,997,454
1872.....	62,421,331	6,036,434	6,500,000	74,957,765
1873.....	72,880,380	6,366,488	8,623,056	87,869,924
1874.....	80,539,782	6,272,010	9,621,280	96,433,072
1875.....	82,292,906	6,312,099	9,270,036	97,875,041
1876.....	78,818,934	5,849,317	8,784,433	93,452,684
1877.....	81,246,847	5,953,932	8,728,622	95,929,401
1878.....	83,101,484	6,028,041	8,480,365	97,609,890
1879.....	75,555,801	5,242,224	6,693,417	87,491,442
1880.....	76,085,940	5,291,313	6,603,103	87,980,356
1881.....	77,256,610	5,282,096	6,414,372	88,953,078
1882.....	78,515,793	5,266,943	6,525,759	90,308,495
1883.....	80,615,448	5,307,116	6,611,101	92,533,665
1884.....	80,293,418	4,013,888	6,541,368	90,848,674
1885.....	82,825,255	4,074,358	6,602,851	93,502,464
1886.....	85,132,151	4,160,222	6,760,956	96,053,329
1887.....	96,383,486	4,741,540	7,172,075	108,302,101
1888.....	99,430,297	4,908,345	7,406,186	111,744,830
1889.....	102,886,043	4,987,632	7,611,678	115,485,353
1890.....	119,613,603	5,395,021	12,617,795	137,626,419
1891.....	123,110,219	5,550,976	12,948,696	141,609,891
1892.....	126,383,584	5,682,676	13,415,018	145,481,278

B.

REPORT OF SPECIAL ASSESSMENT CLERK.

OFFICE OF THE COMMISSIONERS,
DISTRICT OF COLUMBIA,
SPECIAL ASSESSMENT DIVISION,
Washington, July 1, 1891.

GENTLEMEN: I have the honor to make the following report for the year ending June 30, 1891:

This division has, under the various orders of the Commissioners of the District of Columbia, jurisdiction over all records and papers relating to special assessments made for any class of work, except water-main assessments, and is charged with the duty of preparing the assessments for work done under the compulsory permit system, and after approval to record the same, issue bills therefor for service on parties interested, care for the return of such service, keep correct accounts with each lot and part of lot affected by any assessment that may have been or that shall be made, investigate and adjust all claims for drawbacks under the several acts of Congress, prepare for issue all certificates that may be found due, and keep proper records and accounts thereof, both as to issue and redemption.

The current work of this division is very great; 7,184 communications and papers have been briefed, acted on, and filed during the year, making a total of 78,160 to date, exclusive of the reports made upon certificates as to taxes issued from the office of the collector of taxes.

The special assessments are classed as follows:

Old corporation assessments for each of the following kinds of work, viz: Sidewalk, curbing, carriage way, sewer, nuisance, water and gas services, lighting streets, opening alleys, etc., prior to February 21, 1871.

M. G. Emery, assessments, including all work done subsequent to February 21, 1871, the assessments for which were approved by M. G. Emery, mayor.

H. D. Cooke, assessments, including all work done subsequent to February 21, 1871, the assessments for which were approved by H. D. Cooke, governor.

Board of public works, including all assessments made by the board of public works, for work done under contracts made by the said board.

Commissioners of the District of Columbia, including all assessments made by the Commissioners of the District of Columbia, for work done under the board of public works contracts, and extensions made by the Commissioners of the District of Columbia, for the improvement of avenues and streets.

Alley assessments, for work done under board of public works contracts, and extensions made by the Commissioners of the District of Columbia.

Condemnation assessments, for the payment for land condemned and taken for alleys. These condemnations are made by the United States marshal's jury, and the assessment therefor is made against property benefited thereby.

Compulsory permit, including the assessments made under acts of Congress approved July 9, 1886; March 3, 1887; July 18, 1888; March 2, 1889, and August 6, 1890.

All lien certificates issued upon the several classes of assessments are recorded in this division, and an account is kept with each certificate showing amounts of payments thereon, principal, interest, and costs; and when satisfied the certificate is taken up, canceled, and filed.

DRAWBACK CERTIFICATES.

Issued during the year:

Under acts approved June 19, 1878, and June 27, 1879.....	\$3, 295. 84
Under act approved July 5, 1884.....	121. 70
Under act approved February 12, 1889:	
To lot owners.....	\$3, 630. 98
To holders of scrip.....	750. 59
	4, 381. 57
Under act approved June 2, 1890	55, 863. 89
Total issue during the year.....	63, 663. 00

The total amount found due under the various acts of Congress, so far as adjusted, is as follows:

Acts of 1878 and 1879:	
Assessments of Commissioners and board of public works	\$625, 989. 37
Assessments of H. D. Cooke, governor	212, 009. 93
Act of 1884	118, 455. 12
Act of 1889:	
To property owners.....	\$41, 839. 22
To holders of scrip.....	8, 962. 05
	50, 801. 27
Act of 1890	106, 145. 35
Total found due	1, 113, 401. 04

Total amount issued:

Acts of 1878 and 1879:	
Assessments of Commissioners and board of public works	621, 113. 92
Assessments of H. D. Cooke, governor.....	211, 456. 50
Act of 1884	118, 455. 12
Act of 1889:	
To property owners	\$39, 996. 91
To holders of scrip	8, 962. 05
	48, 958. 96
Act of 1890.....	106, 145. 35

Total issue..... 1, 106, 129. 85

Awaiting satisfactory evidence before issue:

Acts of 1878 and 1879:	
Assessments of Commissioners and board of public works	\$4, 875. 45
Assessments of H. D. Cooke, governor.....	553. 43
	5, 428. 88
Act of 1889:	
To property owners.....	1, 842. 31

Total awaiting issue..... 7, 271. 19

Of the total issue there has been redeemed as follows:

In payment of general taxes:	
As per last report	\$471, 800. 49
Received during the year	54, 909. 21
	526, 709. 70

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In payment of special assessments:

As per last report.....	\$555,263.55	
Received during the year	1,518.84	
		<u>\$556,782.39</u>
Total redemption.....		<u>1,083,492.09</u>
Amount outstanding.....		<u>22,637.76</u>

EIGHT PER CENT CERTIFICATES OF INDEBTEDNESS.

Amount outstanding June 30, 1890, as per last report, par.....		\$57,850.00
Amount redeemed:		
In payment special assessments, par.....	\$100.00	
By United States Treasurer, ex-officio commissioner of sinking fund, as per information kindly furnished from his office, par	31,550.00	
		<u>31,650.00</u>
Total redemption		<u>31,650.00</u>
Outstanding June 30, 1890, par.....		<u>26,200.00</u>

To which should be added the accrued interest at 6 per cent per annum from maturity.

SPECIAL ASSESSMENTS PLEDGED TO THE REDEMPTION OF THE 8 PER CENT CERTIFICATES OF INDEBTEDNESS.

Amount outstanding June 30, 1890, as per last report		\$176,282.81
Collected for account of lien certificates, exclusive of interest and costs	8,294.98	
Collected for general account, no lien certificates issued ...	2.80	
		<u>8,297.78</u>
Total collections.....		<u>8,297.78</u>
Outstanding June 30, 1891		<u>167,985.03</u>

This statement does not include the accrued interest upon lien certificates held by the United States Treasurer, ex officio commissioner of the sinking fund.

The amounts charged to the several street railroad companies have been canceled by the decree of the Supreme Court of the United States, and the right of the office to enforce the collection of a considerable proportion of the special assessments outstanding has been restrained by decrees of the supreme court of the District of Columbia.

LIEN CERTIFICATES NOT HELD BY THE UNITED STATES TREASURER, EX OFFICIO COMMISSIONER OF THE SINKING FUND.

Amount of outstanding lien certificates issued by the late board of public works and held by third parties, for the redemption of which there are outstanding special assessments, as per last report, par.....		\$61,266.39
Redeemed during the year by collections, by sale of property, and by surrender of lien certificates in satisfaction of assessments, par	\$567.14	
Redeemed by drawback certificates under act approved June 2, 1890, assessments canceled	12,954.95	
		<u>13,522.09</u>
Outstanding June 30, 1891		<u>47,764.30</u>

OUTSTANDING LIEN CERTIFICATES FOR WHICH THERE IS NO ASSESSMENT, BUT SUBJECT TO REDEMPTION BY DRAWBACK CERTIFICATES UPON PRESENTATION AND DEMAND UNDER EXISTING LAWS.

Outstanding June 30, 1889, as per last report, par	\$207.74
Redeemed during the year	None
Outstanding June 30, 1890	<u>207.74</u>

COMPULSORY PERMIT ASSESSMENTS.

Under the several acts of Congress relative to permit work, assessments have been made, in accordance with the orders of the Commissioners of the District of Columbia, amounting to \$73,373.29, for detailed statement of which see Appendix I.

For account of these assessments collections have been made as follows:

Under act approved—

July 9, 1886	\$220.50
March 3, 1887	792.91
July 18, 1888	5,330.37
March 2, 1889	26,458.08
August 6, 1890	23,014.75

Total	55,816.61
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OLD CORPORATION ASSESSMENTS.

There has been collected for account of assessments made by the late corporation of Washington during the year, exclusive of interest, \$244.44.

SALES.

At the sale in April, 1891, property was sold for nonpayment of special assessments, at which the following sums were realized:

Compulsory permit assessments	\$106.66
Old corporation assessments	70.87
Board of public works and Commissioners of the District of Columbia, out assessments	224.32

Total, exclusive of interest	401.85
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In closing, I desire to place on record mention of the fidelity with which my clerks have discharged their duty at all times and under all circumstances.

Very respectfully,

WM. OSCAR ROOME,
Special Assessment Clerk, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

APPENDIX I.—Statement of assessments made for work done under the "compulsory permit system," for the year ending June 30, 1891.

File No.	Square.	Work.	Location.	Amount assessed.	Entered of record.	Account approved.
70848	252	Sidewalk	14th st.	\$439.10	July 1, 1890	Mar. 2, 1889
70833	358	Sewer	Alley	186.22	do	Do.
70806	749	do	do	217.21	do	Do.
70978	166	do	do	264.57	July 8, 1890	Do.
70979	447	Sidewalk	7th st.	424.72	do	Do.
71094	660	do	P st	196.73	July 12, 1890	Do.
71017	809	Paving	Alley	272.35	do	Do.
71089	120	Sidewalk	34th st.	88.90	do	Do.
71092	247	Sewer	Alley	414.06	do	Do.
71016	589	Paving	do	609.98	do	Do.
71093	464	Sidewalk	Virginia ave.	48.40	do	Do.
71088	Res. 10	Sewer	Alley	186.04	July 14, 1890	Do.
71090	168	Paving	do	113.94	do	Do.
71101	253	Sidewalk	14th st.	420.56	July 16, 1890	Do.

APPENDIX I.—Statement of assessments made for work done under the "compulsory permit system," etc.—Continued.

File No.	Square.	Work.	Location.	Amount assessed.	Entered of record.	Account approved.			
71160	194	Paving	Alley	\$529.02	July 16, 1899	Mar. 2, 1889			
71159	371	Sewer	do	138.33	do	Do.			
71102	456	Sidewalk	7th st	412.98	do	Do.			
70807	192	Sewer	Alley	253.89	do	Do.			
71191	518	do	Washington st	410.18	July 19, 1890	Do.			
71202	105	do	Alley	158.88	do	Do.			
71213	253	Sidewalk	F st	1,614.16	July 22, 1890	Do.			
	289	do	do						
	320	do	do						
	376	do	do						
71221	247	Sewer	Alley	201.29	do	Do.			
71222	1,002	do	I st. and 13th st.	593.04	do	Do.			
71347	725	Paving	Alley	1,669.54	do	Do.			
71033	245	Sewer	do	76.18	July 23, 1890	Do.			
71387	788	do	do	168.47	do	Do.			
71385	435	do	do	205.07	do	Do.			
71384	Res. 10	do	do	88.08	do	Do.			
71386	620	do	do	108.92	do	Do.			
71418	207	Paving	do	2,862.61	July 25, 1890	Do.			
71417	207	do	do	937.02	do	Do.			
71416	155	do	do	1,266.03	do	Do.			
71401	926	do	do	418.11	July 26, 1890	Do.			
71447	686	do	do	501.78	Aug. 1, 1890	Do.			
71446	585	do	do	1,205.91	do	Do.			
71458	179	Grading and paving ..	do	886.66	Aug. 2, 1890	Do.			
71471	990	Paving	do	1,508.35	Aug. 4, 1890	Do.			
71506	346	Sidewalk	F st	65.28	Aug. 7, 1890	Do.			
71515	395	Paving	Alley	820.93	do	Do.			
71516	534	do	do	95.68	do	Do.			
71524	454	Sidewalk	7th st	235.91	Aug. 8, 1890	Do.			
	455								
71529	179	Paving	Alley	923.88	Aug. 12, 1890	Do.			
71975	676	do	do	2,133.55	Aug. 16, 1890	Do.			
71974	1,020	do	do	968.65	Aug. 18, 1890	Do.			
71999	363	do	do	908.73	Aug. 20, 1890	Do.			
72008	358	do	do	1,335.06	do	Do.			
72007	719	do	do	205.59	do	Do.			
72067	766	Sewer	3d st	250.79	Sept. 2, 1890	Do.			
72069	340	do	Alley	330.58	do	Do.			
72060	620	do	do	116.67	do	Do.			
72052	801	Paving	do	530.65	do	Do.			
72433	809	Sewer	do	83.13	Sept. 3, 1890	Do.			
72432	917	do	do	75.80	do	Do.			
72447	1,018	do	E st. and alley	851.32	do	Do.			
72568	877	Paving	Alley	1,224.71	Sept. 5, 1890	Do.			
73046	250	Sidewalk	14th st	120.67	Oct. 1, 1890	Aug. 6, 1890			
73044	119	do	19th st	68.82	do	Do.			
73387	W. of 553	Paving	Alley	418.36	Oct. 28, 1890	Do.			
74607	159	do	do	287.90	Nov. 20, 1890	Do.			
74724	427	Sidewalk	7th st	547.63	Nov. 28, 1890	Do.			
	428								
	452								
	453								
74822	386	do	D st	539.14	Dec. 10, 1890	Do.			
	387								
	410								
	411								
75092	434	Paving	Alley	4,512.26	Jan. 3, 1891	Do.			
	435								
	464								
	465								
75119	238	Sewer	do	249.92	Jan. 10, 1891	Do.			
75164	190	Paving	do	1,161.19	Jan. 12, 1891	Do.			
75153	167	Sewer	do	178.00	do	Do.			
75151	501	Paving	do	2,636.94	do	Do.			
75159	569	Sewer	do	256.05	do	Do.			
75139	917	Paving	do	340.02	do	Do.			
75150	111	Sidewalk	Q st	50.23	do	Do.			
75138	870	Sewer	Alley	212.56	do	Do.			
75152	112	Sidewalk	Q st	101.16	do	Do.			
75261	349	do	Pennsylvania ave.	346.98	Jan. 17, 1891	Do.			
75267	337	do	Rhode Island ave.	42.17	Jan. 20, 1891	Do.			
75300	192	Paving	Alley	2,036.34	do	Do.			
75620	77	Sidewalk	21st st	163.14	Feb. 16, 1891	Do.			
75619	101								
75640	206	Paving	Alley	1,454.18	do	Do.			
	54	do	do						
	55	Sidewalk	22d st						
	75								
	77			290.15	Feb. 20, 1891	Do.			

APPENDIX I.—Statement of assessments made for work done under the "compulsory permit system," etc.—Continued.

File No.	Square.	Work.	Location.	Amount assessed.	Entered of record.	Account approved.
75639	433					
	434					
	435					
	436					
	437					
	438					
	439					
	462					
	464	Sidewalk	7th st.....	\$1,611.18	Feb. 20, 1891	Aug. 6, 1890
	465					
	466					
	467					
	468					
	469					
	470					
	471					
75698	W of 471					
	423					
	424					
	425					
	426	do	do	2,788.17	Feb. 25, 1891	Do.
75648	448					
	449					
75656	450					
	458	do	do	32.12	do	Do.
75655	(*)	Paving	Alley between Chapin and Stoughton.	470.48	Feb. 26, 1891	Do.
	86					
75660	87					
	89					
	97					
	98	Sidewalk	P st., Georgetown ...	1,130.20	do	Do.
	99					
75742	100					
	101					
75743	362	Paving	Alley	1,414.36	Feb. 27, 1891	Do.
	55	Sidewalk	H st	155.60	Feb. 28, 1891	Do.
75744	56					
	738	do	K st	60.31	do	Do.
75783	429					
	454					
	455	do	7th st.....	869.06	do	Do.
	457					
	458					
75793	535	Sewer	Alley	447.03	Mar. 4, 1891	Mar. 2, 1889
	497	Sidewalk	4½ st	275.18	do	Aug. 6, 1890
77792	540					
	190	Paving	Alley	1,326.99	do	Do.
75791	92					
	93					
	E. of 93					
	94	Sidewalk	P st., Georgetown....	555.32	do	Do.
	E. of 94					
75799	95					
	405					
	406	do	9th st.....	1,258.54	Mar. 7, 1891	Do.
	407					
	408					
75797	183	Paving	Alley	4,029.45	do	Do.
	541	do	do	1,853.19	do	Do.
76804	782	Sidewalk	C st	99.09	Mar. 31, 1891	Do.
	209	do	14th st.....	71.77	do	Do.
76809	166	do	Pa. ave	270.81	Apr. 1, 1891	Do.
	38	do	32d, or High st., Georgetown.	94.31	Apr. 3, 1891	Do.
77214	551	Sewer	Alley	49.58	May 5, 1891	Do.
	263					
77215	264					
	265	Sidewalk	13½ st	391.97	do	Do.
	266					
	267					
	268					
77225	719	Sewer	Alley	143.84	May 6, 1891	Do.
	210	do	do	201.64	do	Do.
77234	620	do	do	27.17	do	Do.
	784					
77511	785					
	786					
	814	Sidewalk	4th st.....	269.25	May 18, 1891	Do.
	815					
	816					

* South college grounds, county.

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APPENDIX I.—Statement of assessments made for work done under the "compulsory permit system," etc.—Continued.

File No.	Square.	Work.	Location.	Amount assessed.	Entered of record.	Account approved.
77510	{ 61) 62) 73)	Sidewalk	32d or High st., Georgetown.	\$204. 65	May 18, 1891	Aug. 6, 1890
77526	364	do	Covington st	86. 32	May 20, 1891	Do.
77527	413	do	T st	58. 22	do	Do.
77600	{ 403) 404)	do	9th st	863. 60	do	Do.
77898	214	Paving	Alley	497. 94	June 18, 1891	Do.
77904	{ 24 26 27 28 29 38 39 40 42 44)	Sidewalk	Bridge st., Georgetown.	822. 61	do	Do.
77996	134	do	R st	82. 44	do	Do.
77956	223	do	New York ave	19. 25	do	Do.
77624	461	do	C st	44. 57	do	Do.
77916	{ 727 728 758 759)	do	2d st	193. 82	do	Do.
77625	677	do	H st	206. 03	do	Do.
77896	551	Sewer	Alley	129. 18	do	Do.
78036	102	Paving	do	196. 71	June 23, 1891	Do.
78045	{ 74) 86)	Sidewalk	High, or 32d st., Georgetown	150. 57	do	Do.
78046	410	Paving	Alley	385. 76	do	Do.
78065	859	do	do	2, 267. 01	June 26, 1891	Do.
		Total		73, 373. 29		

OFFICE OF THE COMMISSIONERS, DISTRICT COLUMBIA, SPECIAL ASSESSMENT DIVISION, Washington, July 29, 1891.

GENTLEMEN: In compliance with your instructions, dated 1st ultimo, I have the honor to submit the following estimate of the amount required for the conduct and support of this office for the fiscal year ending June, 30, 1893:

1 special assessment clerk	\$1, 700. 00
1 clerk at	900. 00
4 clerks at \$1,200	4, 800. 00
Contingent expenses (not incidental to compulsory permit assessments) ..	150. 00
	7, 550. 00

Of the above the special assessment clerk is carried on the roll of the assessor's office; the one clerk at \$900 is carried on the roll of the police department, and the four clerks at \$1,200 each are paid from the appropriation for compulsory permit work.

I take the liberty, since you invite it, to state that my most efficient and responsible clerk, Mr. G. W. Trow, is paid \$900 only, and has working under his direction clerks who receive \$1,200, and I recommend that this be remedied, if in your power, and it meets with your approval.

Very respectfully,

WM. OSCAR ROOME,
Special Assesment Clerk, District of Columbia.
The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

C.

REPORT OF THE COLLECTOR OF TAXES.

OFFICE OF COLLECTOR OF TAXES,
DISTRICT OF COLUMBIA,
Washington, August 13, 1891.

GENTLEMEN: I have the honor to transmit herewith a report in detail of the business of this office for the fiscal year ending June 30, 1891, with such recommendations as I deem necessary for the better and more efficient transaction of the business of the office, as directed in your letter.

I respectfully request that 50 copies of this report be printed for the use of this office.

Very respectfully,

E. G. DAVIS,
Collector of Taxes, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

WASHINGTON, August 10, 1891.

GENTLEMEN: I have the honor to submit the following statement showing the amount of tax balances with which this office was debited at the beginning of the fiscal year commencing July 1, 1890. Also the amount of the tax levies, real and personal, for the year ending June 30, 1891, together with the amounts received for collection on account of the water fund, licenses, dog tax, fees, penalties, etc., and the amount collected on account of the same during the fiscal year ending June 30, 1891.

E. G. DAVIS,
Collector of Taxes, District of Columbia.

GENERAL FUND.

	Dr.	Cr.
	To amount charged.	By amount collected.
To balance of taxes due July 1, 1890:		
Realty tax—		
For years 1845 to 1870		\$1,630.16
For the year ending June 30—		
1872.....		128.23
1873.....		993.94
1874.....	\$2,255.46	1,721.64
1875.....	8,541.99	1,932.40
1876.....	2,608.44	1,229.79
1877.....	18,661.20	1,896.80
1878.....	4,248.86	2,033.76
1879.....	11,424.07	1,893.44

GENERAL FUND—Continued.

	Dr.	Cr.
	To amount charged.	By amount collected.
To balance of taxes due July 1, 1890—Cont'd.		
Realty tax—Continued.		
For the year ending June 30—		
1880.....	\$22,155.98	\$2,164.94
1881.....	20,303.49	1,973.73
1882.....	15,996.32	2,096.74
1883.....	17,220.09	2,694.44
1884.....	17,892.66	2,635.06
1885.....	21,250.75	3,126.73
1886.....	22,541.28	3,904.34
1887.....	23,309.19	5,906.83
1888.....	34,224.80	10,131.86
1889.....	48,349.19	18,216.94
1890.....	188,278.07	126,780.92
	\$479,261.79	\$193,092.69
To amount of levy for year ending June 30, 1891.....	2,104,645.09	1,901,399.97
To amount collected in excess of what was charged to collector on account of general tax arrears 1845 to 1870.....	7,630.16	
To amount collected in excess of what was charged to collector on account of assessment of general tax for year ending June 30—		
1872.....	128.23	
1873.....	993.94	
	2,752.33	
Personal tax:		
For year ending June 30—		
1877.....	30,066.84	
1878.....	71,827.52	
1879.....	34,124.35	
1880.....	15,765.92	
1881.....	23,122.18	15.00
1882.....	7,350.02	
1883.....		15.00
1884.....	14,057.00	15.00
1885.....	6,475.40	12.00
1886.....	8,054.40	12.00
1887.....		15.00
1888.....	2,591.82	30.00
1889.....	7,456.45	927.94
1890.....	12,659.75	6,114.23
	233,551.65	7,156.17
To amount of levy for the year ending June 30, 1891.....	175,404.75	162,468.62
To amount collected in excess of what was charged to collector on account of assessment of personal tax for year ending June 30—		
1883.....	15.00	
1887.....	15.00	
	30.00	
To amount of penalty on taxes:		
Realty tax—		
For the years 1845 to 1870.....		1,404.25
For the year ending June 30—		
1872.....		25.13
1873.....		1,252.86
1874.....		1,777.88
1875.....	1,777.88	2,083.07
1876.....	2,083.07	1,288.41
1877.....	1,288.41	1,803.02
1878.....	1,803.02	1,802.37
1879.....	1,802.37	1,516.47
1880.....	1,516.47	1,704.82
1881.....	1,704.82	1,418.14
1882.....	1,418.14	1,277.42
1883.....	1,277.42	1,523.31
1884.....	1,523.31	1,288.05
1885.....	1,288.05	1,369.47
1886.....	1,369.47	1,405.30
1887.....	1,405.30	1,844.84
1888.....	1,844.84	2,764.40
1889.....	2,764.40	4,373.89
1890.....	4,373.89	22,191.59
1891.....	22,191.59	9,355.47
	60,787.92	63,580.21

GENERAL FUND—Continued.

	Dr.		Cr.	
	To amount charged.		By amount collected.	
To amount of penalty taxes—Continued:				
To amount of penalty on taxes collected in excess of what was charged to the collector on account of assessment of general-tax arrears, 1845 to 1870.....	\$1,404.25			
To amount of penalty on taxes collected in excess of what was charged to the collector on account of assessment of general tax for year ending June 30—				
1872.....	135.18			
1873.....	1,252.86			
		\$2,792.29		
Personal tax:				
For the year ending June 30—				
1887.....			\$19.20	
1888.....	25.50		25.50	
1889.....	375.44		375.44	
1890.....	1,209.25		1,209.25	
1891.....	307.15		307.15	
		1,917.34		\$1,936.54
To amount of penalty on taxes collected in excess of what was charged to the collector on account of assessment of personal tax for the year ending June 30, 1887.....		19.20		
To amount of miscellaneous items received for collection, viz:				
Washington redemption fund—				
Principal.....	\$244.44			
Interest.....	415.93			
	660.37		660.37	
Special tax (corporation of Washington)				
Principal.....	\$3,068.61			
Interest.....	493.35			
	3,561.96		3,561.96	
Licenses.....	158,200.57		158,200.37	
Dog tax.....	12,171.07		12,171.07	
Permit fees.....	4,669.00		4,669.00	
Fees for certificates.....	3,145.00		3,145.00	
Material furnished plumbers.....	17.80		17.80	
Advertising (1875 to 1891).....	899.92		899.92	
Advertising special assessments—				
1875.....	11.66		11.66	
1887.....	33.99		33.99	
Market rents—				
Eastern.....	\$3,446.00			
Western.....	6,239.80			
Georgetown.....	1,218.00			
Washington.....	5,625.00			
	16,528.80		16,528.80	
Police-court fines—				
District of Columbia.....	34,620.48			
United States.....	12,891.36			
	47,521.84		47,521.84	
Building permits.....	9,891.92		9,891.92	
Redemption assessment certificates.....	694.43		694.43	
Inspecting and proving gas meters.....	367.00		367.00	
Sale of old material.....	998.46		998.46	
Pound fees.....	696.25		696.25	
Rent of District of Columbia property.....	2,411.87		2,411.87	
Judgment in favor of District of Columbia.....	7,500.00		7,500.00	
Engineers' licenses.....	603.10		603.10	
Recording tax sales.....	41.50		41.50	
Sale of hay scales.....	1,399.35			
Sale of fish stall.....	63.18			
Tax sale surplus.....	11.76			
		272,100.80		272,100.80
Water fund:				
Water-main tax advertised—				
Principal.....	\$2,863.02			
Interest.....	1,630.54			
	4,493.56			
Water rents, taps, permits, etc.....	268,003.45			
		272,497.01		272,497.01
To amount of increase in assessments, as per assessor's certificates:				
Realty tax.....	8,863.48			
Personal tax.....	3,496.87			
		12,360.35		

GENERAL FUND—Continued.

	Dr.	Cr.
	To amount charged.	By amount collected.
By amount of reduction in assessments, as per assessor's certificates:		
Realty tax.....		\$6,163.61
Personal tax.....		1,220.48
		\$7,384.09
By balance of uncollected taxes:		
Realty tax.....		494,866.42
Personal tax.....		241,698.00
		736,564.42
Total	\$3,618,180.52	3,618,180.52

NOTE.—The following items in the above exhibit were collected through this office for the use of third parties holding the liens representing the taxes:

Special taxes (principal and interest)	\$3,561.96
Washington redemption fund (principal and interest)	660.37
General taxes for the years ending June 30, 1872 and 1873, respectively, represented by tax-lien certificates (principal and interest).....	741.68
Total	4,964.01

RECAPITULATION.

To amount collected on account of—		
Realty tax	\$2,094,492.66	
Personal tax	169,624.79	
Penalties	67,147.29	
Miscellaneous items	272,100.80	
Water fund	270,866.47	
		\$2,874,232.01
To amount reduction in assessments.....		7,384.09
To amount of uncollected taxes.....		736,564.42
Total		3,618,180.52
By cash deposited in the United States Treasury.....	\$2,819,305.66	
By drawback certificates.....	54,909.21	
By tax-lien certificates.....	17.14	
		2,874,232.01
By reductions in assessments.....		7,384.09
By amount of uncollected taxes.....		736,564.42
Total		3,618,180.52

In addition to the receipts from taxes, etc., on account of the general fund, as shown by the foregoing statement, payments and deposits are received by this office on the following accounts, viz:

SPECIAL ASSESSMENTS.

For work done by the late board of public works and deposited, where no lien certificates were issued, to the general account; where lien certificates were issued and are held by the sinking-fund commission, to the certificate account; where lien certificates were issued and are held by third parties, to the First National Bank account:

General account	\$2.80
Certificate account.....	17,170.32
First National Bank account.....	33.94
Condemnation of land	1,298.51
Costs advertising	79.04
Total	18,584.61
Received in payment:	
Cash	
Drawbacks	16,873.74
Bonds	1,518.84
Interest	100.00
	92.03
Total	18,584.61

COMPULSORY PERMIT WORK.

For work done under this system for the improvement and repair of alleys, sidewalks, and sewers, authorized under the following acts of Congress:

Act approved—	
July 9, 1886.....	\$220.50
March 3, 1887.....	792.91
July 18, 1888.....	5,330.37
March 2, 1889.....	26,458.08
August 6, 1890.....	23,014.75
Total.....	55,816.61

Deposits for work to be done under the permit system:

Balance on hand July 1, 1890.....	\$11,545.57
Receipts July 1, 1890, to June 30, 1891.....	170,301.01
Total.....	181,846.58
Disbursements July 1, 1890, to June 30, 1891.....	137,192.19

Balance on hand July 1, 1891.....	44,654.39
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(Includes unapplied balance of deposits received prior to July 1, 1888.)

The following amounts were deposited through this office to the credit of the respective funds:

Repayments to appropriations.....	\$57,001.21
Relief of the poor.....	1,430.00
Police fund.....	1,346.95
Firemen's fund.....	60.00
M. Wright, legacy.....	850.44
Total.....	60,688.60

About \$75,000 have been deposited with the collector during the past year by bidders for furnishing supplies, as required by law, subject to return upon order of the Engineer Commissioner.

A comparison with statements of previous years, accounting for the increase in collections by the increase in the amount of the current year's levy, it will be seen that the percentage of unpaid taxes remains about the same. This, taken in connection with the fact that our advertised tax list contains numerous instances of the same lots being offered for sale annually for unpaid taxes, is very good evidence that certain property is evading payment of taxes, intentionally or otherwise, and the present condition of our tax laws offers no remedy. The revenues of the District could be materially increased by compelling the owners, or the parties who are enjoying the benefits from this property, either by occupancy, rent free, or an income therefrom, to pay the taxes levied; but this can not be done until the Commissioners are clothed with the authority to inaugurate some method that is not hampered by the uncertain and tedious delay of the courts. Congress should be urged to grant this authority and that without delay.

A very important advantage gained by the change of time when property can be advertised and sold for delinquent taxes is shown by the arrangement of the advertisement of our last sale. There has been no change in the manner of doing business by the District that has met with such universal approval as the numerical arrangement as to squares, with alphabetical index used on this occasion. Before the change of time for sale the preparation of the delinquent tax list in this way was impossible, as the time for the purpose was not available. The arrangement here inaugurated, owing to the facility of reference, has been found

to be of inestimable value to investors and of great convenience to owners of property.

By reference to the United States Statutes at Large, Vol. 21, p. 460, it will be seen that a provision of the act of March 3, 1881, says:

The duplicate of assessments for the fiscal year of 1882, and annually thereafter, shall be prepared by the assessor before the 1st day of November of each year, and upon the completion thereof shall be delivered to the collector, who shall receipt in duplicate for the total amount of taxes shown by said assessment. * * * All tax bills shall be made up by the collector of taxes, and he shall be held responsible under his bond for all taxes except such as he may not be able to collect, etc.

Now, as a matter of fact, the provisions of this act have never been enforced, the assessor retaining possession of the tax ledgers after preparing the assessment and rendering all bills notwithstanding the plain reading of the law. No intention to evade the law is charged, but, as I understand it, matters have simply been allowed to remain as they were previous to the passage of the act, that being the best the necessities of the situation would permit. As it is the collector is obliged to assume the responsibility for acts over which he has no control. It is true that there are three clerks permanently detailed from this office to prepare bills in the assessor's office, but the collector exercises no control whatever over them. With this exception the law is a dead letter. Almost invariably requests for tax bills are made to the collector, who is supposed to be the custodian of the accounts. He can only refer them to the assessor and take the responsibility for any failure or neglect in promptly replying to the same. I submit that the collector should be relieved of the responsibility, and, in view of the fact that experience has proved that it would be unwise to make any change in the present arrangement, I respectfully suggest that Congress be asked to change the law so as to place the duty and responsibility upon the assessor, as it is reasonable to suppose that he having charge of and being familiar with the books, is the proper officer to render bills, thus legalizing the arrangement in force and avoiding legal complications hereafter.

I am satisfied that the law as at present constituted can not be enforced without difficulty and uncertainty, and in view of this and in addition to the unfairness of compelling the collector to assume the responsibility of a state of affairs over which he has no control, will be found to be good and sufficient reasons for the change of the law.

By an act of Congress approved February 6, 1879, it was made the duty of the collector of taxes to furnish certified statements of taxes, etc.

In order to comply fully with this law these certificates should be prepared under the immediate direction of the collector of taxes; but as Congress failed to provide any means for carrying out the law it became necessary to have the statements prepared in the assessor's office by his clerks and under his supervision. Hence it would seem proper that Congress be asked to so amend the law as to make these statements the assessor's certificates, which they are in fact. The books and records are in his charge and under his control, and he should give the certificates. It is scarcely fair or just to hold the collector of taxes responsible for a statement prepared in another office, which he has no opportunity to verify, and to which he has hardly the time to affix his signature. Justice as well as business methods suggest the change.

A matter that has been recommended heretofore in the reports from this office is again referred to, owing to its very great importance, and that is the enactment by Congress of a new tax law. Prompt and energetic

measures should be immediately taken to prepare a law, comprehensive and complete in detail for this purpose, as there is no measure of greater moment to the interests of the District.

In listing property for sale for arrears of taxes, this office has been governed by the advice of the District attorney and has advertised for one year, omitting to readvertise property which had already been advertised and bought in by the District. Up to this point the law has been complied with, but property thus bid in by the District has been allowed to remain in that condition until it happened to be purchased by a third party. By failure of the Commissioners to carry out the law by reselling as provided, the District loses its lien upon said property, and when the same property is purchased at a subsequent sale the courts have decided that the purchaser is entitled to a deed without paying the arrears of taxes standing against the property prior to sale at which he purchased, thus resulting in a great loss to the District revenues. The conditions imposed upon the Commissioners when property is bought by the District are so cumbersome and tedious that their enforcement is rendered extremely difficult, if not impossible, and even if the law provided for readvertisement of arrears every year it would be impossible for this office, with its present insufficient force, to prepare the list in time for publication. In the meantime large numbers of persons are demanding the elimination of taxes under these court decisions and thousands of dollars are thus lost to the District. This is neither just to the District or to the prompt taxpayers, and the proper remedy should be applied at once. This office has on previous occasions called the attention of the Commissioners to this state of affairs, notably under date of February 6, 1890, and June 12, 1891. No law could be enacted that would offer greater facilities to property owners to avoid payment of taxes, without expense or delay, than the one now in force, and why it has not been repealed long ago I can not understand.

The authority to reassess property against which, for various reasons, the courts have enjoined the collection of the tax by the District is second only in importance to the enactment of a new tax law, and should be brought to the attention of Congress without further delay.

Making taxes receivable in one payment instead of, at present, in two installments is again recommended for your consideration. The numerous complaints of taxpayers who overlook payment of the second half of the tax until attention is called to it by seeing their property advertised and duplication of work necessary in making this collection are good reasons for the change. The only reason that has been advanced against the change is one of sentiment, that is, it would be oppressive to the small taxpayer. By making taxes due in January of each year, with the privilege of paying without penalty until the ensuing May, would, I think, meet all objections.

A source of complaint on the part of taxpayers is the way bills for taxes are rendered. Persons who apply for bills are given those for the current year only, unless otherwise requested; the result is there may be several years' arrears of taxes on the property, of which they remain in ignorance. The mere fact of payment of one bill is to a great many people evidence that there can be nothing owing previous to the time for which this bill was rendered, thinking the custom pursued in mercantile affairs prevails here, which proves frequently to be a very expensive delusion.

All bills presented at this office for payment, with the exception of those rendered by the special assessment division, are completed by

having interest and penalty added to the time of payment. Bills made out by the special assessment division are not completed, and this office, no matter how busy, is compelled to calculate interest, thus delaying the legitimate business of the office and causing great inconvenience to the public. This state of affairs originated in the detail of a clerk from the special assessment division who was familiar with the assessments of the late board of public works and with the securities receivable in payment on account of the same, and placed in the collector's office, where he could facilitate the payment of these accounts. The necessity of this no longer exists, as this work is done by a clerk, in addition to his other duties, who is paid from the funds of this office, but the office is still called upon, in addition to this, to calculate interest on old corporation special taxes and for assessments for work done under the permit system. There is no reason why these bills when rendered should not be completed by the addition of interest, and there are many reasons why they should. They are deceptive to the general public in their incomplete state, and are a source of much complaint. The legitimate duties of this office are to receive payment of bills, not to prepare bills for payment, which from the very nature of things is impossible to properly do, as the records from which accounts are made up are in charge of the clerk who renders the bills, and I think the duty should devolve upon him.

By the adoption of a uniform system of rendering bills comprehensive and simple in detail a boon would be conferred upon the public, and District officials would be relieved from the charge of neglect of duty so often and so inconsiderately made.

We again submit estimates for an increase in the force of this office, the necessity of which becomes more apparent every day, and its importance I cannot too strongly urge upon your attention. The business of the office keeps pace with the increase of population; the subdivision and improvement of ground following, as a matter of course, the demand for accommodation for this increase. The subdivision and improvement of suburban property is a factor in the increase of business that is not appreciated outside of this office. Property that was assessed a few years ago by the acre has been subdivided into lots; the one bill that was rendered and collected originally has multiplied into hundreds, thus increasing the labor of collecting and accounting for the same proportionately. Numerous other duties have been added the past few years that require care and attention, but provision has not been made to meet and perform these duties. While the force of this office consists nominally of a collector, cashier, and eight clerks, as a matter of fact but five clerks are available for the purposes required, as three clerks paid out of the appropriation for this office are detailed permanently for duty under the assessor, as heretofore stated; and at no time, not even during our busiest seasons, has the collector the privilege of securing their services. Owing to this detail the force of this office is numerically less than allowed by Congress, with no reduction in the amount appropriated. Under these circumstances I suggest that the three clerks now provided for in the estimates of this office be included in the assessor's estimates, if not transferred by the amendment to the act of March 3, 1881, already suggested.

The amount annually appropriated for the collection of arrears of personal tax is not included in our estimates, but I think the wisdom of continuing the appropriation for this purpose can not be questioned, as reference will show that \$7,500 was collected on account arrears of personal taxes, during the past year, owing entirely to the efforts in

this direction that the office was enabled to put forth with the sum appropriated. Three thousand dollars would not be too much for this purpose for the next year, and I rely upon the success that attended our efforts heretofore to obtain this appropriation without advancing other reasons.

In conclusion, I beg to say that the matters referred to in this report are of paramount importance to the welfare of the District, and for this reason, notwithstanding but little encouragement has been heretofore received from Congress, I have felt that my duty would not be properly performed if I neglected to urge their importance upon every occasion, even to the extent of ignoring other necessary but slightly less important measures.

Very respectfully,

E. G. DAVIS,

Collector of Taxes, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

WASHINGTON, August 10, 1891.

GENTLEMEN: I have the honor to submit the following estimate of expenses of this office for the fiscal year ending June 30, 1893:

Collector of taxes.....	\$4,000
Deputy collector of taxes	2,000
Cashier.....	1,800
Assistant cashier	1,600
Bookkeeper	1,600
Four clerks, at \$1,400	5,600
Two clerks, at \$1,200	2,400
Bank messenger	1,200
Messenger	600
Contingent expenses	1,500
Total.....	22,300

Very respectfully,

E. G. DAVIS,

Collector of Taxes, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

D.

REPORT OF THE AUDITOR.

OFFICE OF THE AUDITOR
OF THE DISTRICT OF COLUMBIA,
Washington, December 5, 1891.

GENTLEMEN: I have the honor to submit herewith a report of the receipts and expenditures of the District of Columbia, as shown in accompanying exhibits marked A to F, respectively, for the fiscal year which ended June 30, 1891.

Exhibit A relates to the revenues, showing, first, the cash surplus on hand June 30, 1890, together with the receipts from reimbursement of expenditures on account of the 48-inch and the Fourteenth street water mains, half of unused balances of appropriations credited back to the general fund, taxes, licenses, and all other distinctively District of Columbia sources of revenue; secondly, the amount appropriated therefrom to meet the half of appropriations for which the District is liable; and thirdly, the surplus or unappropriated balance of cash remaining in the Treasury June 30, 1891.

Exhibit B is a summary of receipts on account of water rents and taxes, and also special funds for which the Government acts in the capacity of trustee, collecting and holding them in trust subject to the order of the individual owners entitled to receive the same.

Exhibit C is a general statement showing, first, the balance of appropriations unexpended and subject to requisition June 30, 1890, the total amount appropriated for the year under various acts of Congress, and repayments to appropriations for the same period; secondly, the amount advanced therefrom by the Secretary of the Treasury upon requisitions; and thirdly, the balance of appropriations subject to requisition in the Treasury of the United States June 30, 1891.

Exhibit D is a classified statement of expenditures, consisting of payments by the Commissioners in checks drawn upon the Treasurer of the United States, with whom, under the law, all moneys advanced upon requisition are deposited; and of requisitions approved by the Commissioners in favor, respectively, of the officers of various charitable institutions, and the Treasurer of the United States, as *ex officio* commissioner of the sinking fund, on account of the principal and interest of the bonded debt.

Exhibit E is a summary statement of the Commissioners' requisition and disbursement account, showing the deposits made by them with the Treasurer of the United States on account of the general expenses of the District of Columbia, checks drawn against the same by them, and balance subject to their check remaining with the Treasurer June 30, 1891.

Exhibit F is a series of statements of special and trust funds, showing amounts collected and deposited in the Treasury of the United

States, advances made to the Commissioners upon their requisitions, and balances subject to requisition remaining in the Treasury June 30, 1891.

The law creating the office of disbursing clerk, with authority to pay laborers in cash and upon the line of their work instead of by check and at the District building, became operative July 1, 1891, and has resulted, as was foreseen, in the saving of much time to the individual and to the government as well. But, important as this consideration may be, the fact that the new system lessens materially the temptations which formerly beset the laborer, in his search for some one to cash his check or witness his signature, still more strongly commends it to the approval of all good citizens who have given thought to the subject.

The business of the office is growing so rapidly that in order to dispatch it with any degree of promptness an addition to the force in the near future is an imperative necessity. In 1884 there were 4,700 claims audited, while during the year just closed the number amounted to 8,652—an increase of nearly 100 per cent, yet the clerical force is less by one now than it was in 1884, on account of the promotion of one of the clerks to the office of disbursing clerk.

In order that the current work of the office might not suffer, I have found it necessary temporarily to suspend the examination of the collector's account for 1890 and 1891, and can not therefore embody the audit of the same in the present report, but shall endeavor to submit it at an early day in a supplemental statement.

Eight thousand six hundred and fifty-two audits have been made during the year, requiring the drawing of 41,566 checks in payment.

I have been placed under obligation to the gentlemen associated with me in the office for the promptness and fidelity with which they have discharged the duties devolved upon them and gladly bear testimony to their worth and efficiency.

With sincere appreciation of your uniform kindness and courtesy and of the confidence you have reposed in me, I am, with great respect,

Your obedient servant,

J. T. PETTY,
Auditor, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

D C 91—4

A.—Statement of revenues of the District of Columbia, and appropriations by the United States, for the fiscal year ended June 30, 1891.

From what source received.	Detail.	Total.	Aggregate.
REVENUES OF THE DISTRICT OF COLUMBIA.			
Balance to the credit of the District of Columbia in the United States Treasury July 1, 1890, available for appropriation			\$105,512.53
Amount credited to the revenues of the District of Columbia on account of 48-inch and Fourteenth street water mains, transferred to water fund, act March 3, 1891:			
48-inch main		\$282,145.45	
Fourteenth street main		27,535.29	
			309,680.74
Unexpended balances of appropriations carried to the credit of the general fund (District of Columbia half)			50,328.02
General taxes, including penalties	\$2,290,536.88		
Licenses	158,200.57		
		2,448,737.45	
Eastern Market rents	3,446.00		
Western Market rents	6,239.80		
Georgetown Market rents	1,218.00		
Washington Market Co., franchise rental	5,625.00		
		16,528.80	
Rent of hay scales	1,399.35		
Rent of wharves, street termini, and buildings	2,138.75		
Rent of fish wharves and stalls	336.30		
		3,874.40	
Fines, police court (District of Columbia cases)	34,620.48		
Fines, police court (United States cases)	12,891.36		
		47,511.84	
Fees for tax certificates	3,145.00		
Permit fees for sewers and gas	4,669.00		
Building permits	9,901.92		
Tax on dogs	12,171.07		
Pound fees	696.25		
Fees for inspecting gas and meters	367.00		
Engineers' licenses	603.00		
Material furnished	17.80		
Sale of old material	998.46		
Surplus from sale of contractors' guaranty bonds	5.60		
Labor and sale of products of Reform School	1,423.94		
Riggs estate, judgment case of Woodbury vs. District of Columbia	7,500.00		
Baltimore and Potomac R. R. Co., reimbursement for Eastern Branch bridge	10,000.00		
Proceeds of sale of property of Eastern Branch bridge	67.08		
Advertising	945.57		
Recording tax sales	41.60		
		52,553.29	
Total revenues of the District of Columbia			2,569,205.78
APPROPRIATIONS BY THE UNITED STATES.			
General expenses of the District of Columbia, 1891 (act Aug. 6, 1890)	5,556,377.18		
Education of feeble-minded children, 1891 (act Aug. 30, 1890)	3,400.00		
Support of convicts, 1891 (act Aug. 30, 1890)	21,000.00		
Rock Creek Park (act Sept. 27, 1890)	92,000.00		
Deficiencies (act Sept. 30, 1890)	97,173.39		
Deficiencies (act March 3, 1891)	69,082.30		
	5,839,032.87		
One-half of which is			
Public bathing beach (act Sept. 26, 1890)		2,919,516.43	
		3,000.00	
			2,922,516.43
Surplus, balance to credit of the District of Columbia in the United States Treasury June 30, 1891, available for appropriation			112,210.64

B.—Receipts on account of special and trust funds for the fiscal year ended June 30, 1891.

On what account received.	Total.
Water taxes and rents	\$272, 495. 01
Washington special-tax fund	660. 37
Washington redemption fund	3, 561. 96
Redemption of tax-lien certificates	741. 68
Redemption of assessment certificates	694. 43
Contractors' guaranty fund (act June 11, 1878)	45, 200. 23
Policemen's relief fund (act February 25, 1885)	11, 227. 61
Firemen's relief fund (act February 25, 1885)	1, 698. 17
Total	336, 279. 46

C.—Statement of appropriations and advances by the United States to the District of Columbia for the fiscal year ended June 30, 1891.

For what purpose.	Detail.	Total.	Aggregate.
APPROPRIATIONS.			
Balance to the credit of the District of Columbia in the United States Treasury July 1, 1890, subject to requisition, on account of appropriations for the year 1890, and prior years		\$208, 728. 28	
General expenses of the District of Columbia, 1891 (act Aug. 6, 1890)	\$5, 556, 377. 18		
Education of feeble-minded children, 1891 (act Aug. 30, 1890)	3, 400. 00		
Support of convicts, 1891 (act Aug. 30, 1890)	21, 000. 00		
Public bathing beach, 1891 (act Sept. 26, 1890)	3, 000. 00		
Rock Creek Park (act Sept. 27, 1890)	92, 000. 00		
Deficiencies (act Sept. 30, 1890)	97, 173. 39		
Deficiencies (act Mar. 3, 1891)	69, 082. 30		
General expenses of the District of Columbia, 1892 (act Mar. 3, 1891)	45, 728. 88	5, 887, 761. 75	
Repayments to appropriations for the year—			
1891	412, 933. 94		
1890	219, 736. 31		
1889	9, 840. 80		
1888	2, 694. 57		
1887	253. 43		
1885	9. 50	645, 468. 55	
			\$6, 741, 958. 58
ADVANCES.			
Amount advanced by the Secretary of the Treasury upon requisitions on account of appropriations for the year—			
1891	5, 668, 547. 16		
1890	293, 521. 67		
1889	15, 499. 64		
1888	254. 56		
1887	19. 40		
1885	380. 62		
1892	45, 728. 88	6, 023, 951. 93	
Balances of appropriations which, not having been used within the limit of three years fixed by law, are now returned in equal parts to the United States surplus fund and the District of Columbia general fund		100, 656. 04	6, 124, 607. 97
Balance to the credit of the District of Columbia in the United States Treasury June 30, 1891, subject to requisition, on account of appropriations for the year 1891 and prior years			617, 350. 61

52 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

D.—Statement of expenditures of the government of the District of Columbia, from July 1, 1890 to June 30, 1891.

Appropriations.	Detail.	Total.	Aggregate.
IMPROVEMENT OF STREETS, AVENUES, AND ROADS.			
Repairs to concrete pavements, 1891	\$117,748.67		
Repairs to concrete pavements, 1890	3,449.21		
Total		\$121,197.88	
Grading streets, roads, and alleys, 1891	11,972.10		
Grading streets, roads, and alleys, 1890	1,028.82		
Total		13,000.92	
Surveys of the District, with reference to the extension of streets and avenues, 1891	6,930.67		
Surveys of the District, with reference to the extension of streets and avenues, 1890	514.79		
Total		7,445.46	
Surveys: Subdivision of land, 1891	3,337.89		
Surveys: Subdivision of land, 1890	464.98		
Total		3,802.87	
Improvement of streets and avenues:			
Georgetown schedule, 1891	39,371.43		
Georgetown schedule, 1890	23,501.25		
Total		62,872.68	
Northwest schedule, 1891	178,024.89		
Northwest schedule, 1890	23,209.60		
Northwest schedule, 1889	749.06		
Total		201,983.55	
Southwest schedule, 1891	39,295.11		
Southwest schedule, 1890	16,878.25		
Total		56,173.36	
Southeast schedule, 1891	53,105.76		
Southeast schedule, 1890	6,665.06		
Total		59,770.82	
Northeast schedule, 1891	101,745.91		
Northeast schedule, 1890	14,805.07		
Total		116,550.98	
General schedule, 1890		19,379.68	
Twentieth and S streets, N. W		1,755.14	
Constructing county roads and suburban streets:			
Paving Nichols avenue, 1891	756.96		
Paving Maple street, 1891	9,322.64		
Paving Larch street, 1891	4,406.06		
Paving Fourteenth street extended, 1891	35.35		
Paving Brightwood avenue, 1891	3,248.81		
Paving R street extended, 1891	14,387.06		
Grading and regulating—			
Kenesaw and Wallach streets, 1891	6,823.57		
Howard avenue, 1891	1,213.36		
Lincoln avenue, 1891	8,623.62		
Brightwood avenue, 1891	3,109.30		
Pennsylvania avenue extended, 1891	1,328.00		
Bunker Hill road, 1891	13.50		
Connecticut avenue extended, 1891	2,423.73		
Brentwood road and Patterson avenue, 1891	4,527.32		
Streets in Takoma Park, 1891	8,142.56		
Anacostia road, 1891	18.17		
Naylor's road, 1891	15.00		
New Cut road, 1891	60.50		
California avenue extended, 1891	4,500.24		
North Capitol street extended, 1891	8,331.12		
First street, extended 1891	1,810.26		
Eighteenth street extended, 1891	58.00		
Laurel avenue, 1891	244.50		
Seventeenth street extended, 1891	1,364.67		
Ridge and Loughboro roads, 1891	9.00		
Pennsylvania avenue extended, 1890	19,809.81		
Fourth street east, extended, 1890	966.06		
Canal road, 1890	1,292.10		
Fourteenth street extended, 1890	964.34		
Massachusetts avenue extended, 1890	4,406.43		
Brightwood avenue, 1890	2,742.02		
Rock Creek road, 1890	31.48		
Washington street, Anacostia, 1890	110.04		
Jackson street, Anacostia, 1890	150.63		

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 53

D.—Statement of expenditures of the government of the District of Columbia, from July 1, 1890, to June 30, 1891—Continued.

Appropriations.	Detail.	Total.	Aggregate.
IMPROVEMENT OF STREETS, AVENUES, AND ROADS—cont'd.			
Constructing county roads and suburban streets—Cont'd.			
Grading and regulating—Continued.			
Jefferson street, Anacostia, 1890	\$30. 58		
Adams and Taylor streets, Anacostia, 1890	120. 51		
Bunker Hill road, 1890	2, 891. 60		
Total for paving, grading, and regulating		\$118, 228. 90	
Permit work:			
Work on alleys and sidewalks, 1891	158, 877. 65		
Work on alleys and sidewalks, 1890	29, 824. 56		
Work on alleys and sidewalks, 1889	236. 08		
Work on roadways, 1891	23, 471. 52		
Total for permit work		212, 409. 81	
Aggregate for street work			\$994, 632. 05
CARE OF STREETS, ROADS, AND ALLEYS.			
Cleaning and sprinkling streets, avenues, and alleys, 1891 ..	93, 451. 65		
Cleaning and sprinkling, streets, avenues, and alleys, 1890 ..	5, 821. 63		
Total		99, 273. 28	
Repairs to streets, avenues, and alleys, 1891	43, 542. 85		
Repairs to streets, avenues, and alleys, 1890	1, 262. 62		
Repairs to streets, avenues, and alleys, 1888	2. 04		
Total		44, 807. 51	
Street lamps, lighting by gas and oil, 1891	105, 981. 18		
Street lamps, lighting by gas and oil, 1890	20, 207. 69		
Street lamps, lighting by gas and oil, 1889	1, 383. 46		
Total		127, 572. 33	
Street lamps, electric lighting, 1891	42, 235. 40		
Street lamps, electric lighting, 1890	3, 520. 11		
Total		45, 755. 51	
Repairs to county roads, 1891	48, 175. 72		
Repairs to county roads, 1890	3, 909. 49		
Total		52, 085. 21	
Parking commission, care of trees and parks, 1891	16, 744. 33		
Parking commission, care of trees and parks, 1890	916. 78		
Total		17, 661. 11	
Condemnation of land for streets, alleys and roads, 1891-'92 ..	9, 728. 88		
Condemnation of land for streets, alleys and roads, 1891 ..	1, 605. 96		
Condemnation of land for streets, alleys and roads, 1890 ..	197. 41		
Total		11, 532. 25	
Aggregate for care of streets, etc			398, 687. 20
SEWERS.			
Cleaning and repairing sewers and basins, 1891	39, 572. 85		
Cleaning and repairing sewers and basins, 1890	1, 303. 22		
Total		40, 876. 07	

54 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

D.—Statement of expenditures of the government of the District of Columbia from July 1, 1890, to June 30, 1891.

Appropriations.	Detail.	Total.	Aggregate.
Replacing obstructed sewers, 1891	\$21, 183. 04		
Replacing obstructed sewers, 1890	338. 64		
Total.....		\$21, 521. 68	
Constructing main and pipe sewers, 1891.....	84, 054. 38		
Constructing main and pipe sewers, 1890.....	13, 481. 18		
Total.....		97, 535. 56	
Constructing suburban sewers, 1891.....	44, 130. 15		
Constructing suburban sewers, 1890.....	4, 643. 46		
Total.....		48, 773. 61	
Gauging sewers and rainfall, 1891.....		2, 342. 39	
Condemnation of rights of way for sewers, 1891		3, 379. 75	
Building brick cement house for sewer department, 1891		2, 288. 84	
Examination of sewerage system, 1890		5, 246. 92	
Completion of sewerage system, 1885.....		62	
Aggregate for sewers			\$221, 965. 44
BRIDGES.			
Ordinary care of bridges, 1891	3, 581. 17		
Ordinary care of bridges, 1890	371. 90		
Total.....		3, 953. 07	
Construction and repair of bridges, 1891.....	16, 520. 50		
Construction and repair of bridges, 1890.....	660. 26		
Total.....		17, 180. 76	
Construction of Bennings road bridge, 1891-'92.....		98. 17	
Aggregate for bridges.....			21, 232. 00
SALARIES AND EXPENSES OF OFFICES.			
Salaries:			
Executive office, 1891	41, 909. 86		
Auditor's office, 1891	16, 156. 02		
Assessor's office, 1891	17, 264. 42		
Collector's office, 1891	17, 181. 63		
Attorney's office, 1891	8, 600. 00		
Coroner, 1891.....	1, 800. 00		
Employés of markets, 1891.....	3, 600. 00		
Engineer's office, 1891	41, 031. 44		
Engineer's office, 1890	111. 00		
Sinking Fund office, 1891.....	2, 400. 00		
Board to examine steam engineers, 1891	811. 80		
Superintendent of charities, 1891	675. 83		
Total.....		151, 542. 00	
Contingent expenses of the above offices, including expenses of police courts and health office, 1891	22, 422. 71		
Contingent expenses:			
Executive office, 1890.....	618. 13		
Executive office, 1889.....	9. 20		
Auditor's office, 1890	45. 67		
Assessor's office, 1890.....	515. 22		
Assessor's office, 1889.....	398. 62		
Collector's office, 1890.....	152. 20		
Collector's office, 1889.....	17. 21		
Attorney's office, 1890.....	57. 00		
Attorney's office, 1889.....	4. 00		
Coroner's office, 1890.....	80. 00		
Engineer's office, 1890.....	452. 26		
Engineer's office, 1889.....	241. 47		
Engineer's stables, including harness, 1891	4, 812. 65		
Contingent expenses and repairs to market houses, 1890.....	12. 60		
Total.....		29, 838. 94	
Rent of building for District offices, 1891.....	3, 600. 00		
Rent of attorney's office, 1891.....	91. 67		
Rent of attorney's office, 1890.....	8. 33		
Total.....		3, 700. 00	

D.—Statement of expenditures of the government of the District of Columbia, from July 1, 1890, to June 30, 1891—Continued.

Appropriations.	Detail.	Total.	Aggregate.
SALARIES AND EXPENSES OF OFFICES—continued.			
General advertising, 1891.....	\$2,245.41		
General advertising, 1890.....	6,561.51		
General advertising, 1889.....	494.23		
General advertising, 1888.....	16.02		
General advertising, 1887.....	14.40		
Total.....		\$9,331.57	
Collection of taxes by distraint, 1891.....	1,732.00		
Collection of taxes by distraint, 1890.....	65.00		
Total.....		1,797.00	
Pay of coroner's jurors, autopsies, and expenses of coroner's office, 1891.....		723.00	
Prepare book of arrears of taxes, 1891.....		2,992.13	
Aggregate for salaries, etc.....			\$199,924.64
METROPOLITAN POLICE.			
Pay of officers and members, 1891.....		446,712.02	
Rent of police headquarters and substation, 1891.....	900.00		
Rent of police headquarters and substation, 1890.....	300.00		
Total.....		1,200.00	
Fuel, 1891.....	1,904.21		
Fuel, 1890.....	107.94		
Total.....		2,012.15	
Contingent expenses, 1891.....	15,554.20		
Contingent expenses, 1890.....	1,452.25		
Total.....		17,006.45	
Repairs to station houses, 1891.....		1,982.16	
Police signal and telephone system in fifth or eighth precincts, 1891.....	1,505.74		
Police signal and telephone system in the fifth, seventh, or eighth precincts, 1890.....	3,540.00		
Total.....		5,045.74	
Additional story to fourth and sixth precinct station houses, 1891.....	9,840.00		
Appliances for heating water, 1891.....	195.00		
Stables for fifth and eighth precincts, 1891.....	4,868.08		
Total.....		14,903.08	
Aggregate for police.....			488,861.60
FIRE DEPARTMENT.			
Pay of officers and members, 1891.....		108,123.91	
Repairs to engine houses, 1891.....	2,988.41		
Repairs to engine houses, 1890.....	18.30		
Repairs to engine houses, 1889.....	62.09		
Total.....		3,068.80	
Repairs to apparatus and for new appliances, 1891.....	2,125.98		
Repairs to apparatus and for new appliances, 1890.....	386.86		
Total.....		2,512.84	
Fuel, 1891.....	1,949.14		
Fuel, 1890.....	338.08		
Fuel, 1889.....	3.72		
Total.....		2,290.94	
Contingent expenses, 1891.....	7,351.90		
Contingent expenses, 1890.....	1,648.01		
Contingent expenses, 1889.....	61.90		
Contingent expenses, 1888.....	5.10		
Total.....		9,066.91	
Forage, 1891.....	4,052.65		
Forage, 1890.....	411.28		
Total.....		4,463.93	
Purchase of hose, 1891.....		2,980.00	
Purchase of horses, 1891.....		3,250.00	
Purchase of site and erection of a truck house, 1891.....		11,969.14	
Aggregate for fire department.....			147,726.47

56 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

D.—Statement of expenditures of the government of the District of Columbia from July 1, 1890, to June 30, 1891—Continued.

Appropriations.	Detail.	Total.	Aggregate.
TELEGRAPH AND TELEPHONE SERVICE.			
Pay of employés, 1891.....		\$10,664.21	
General expenses, battery supplies, repairs, etc., 1891.....	\$6,873.92		
General expenses, battery supplies, repairs, etc., 1890.....	1,880.33		
General expenses, battery supplies, repairs, etc., 1889.....	26.90		
Total.....		8,781.15	
Expenses of board to consider the location of electric wires, 1891.....		5,723.67	
Expenses of investigating the telegraph and telephone systems, 1889.....		1.60	
Aggregate for telegraph system.....			\$25,170.63
COURTS AND JUDICIAL EXPENSES.			
Pay of employés, police court, 1891.....		10,864.30	
Pay of jurors in police court, 1891.....		1,600.00	
Pay of justice of the peace, acting judge of the police court, 1891.....		370.00	
Marshal's fees, police court, 1891.....		1,933.00	
Witness fees, police court, 1891.....	7,000.00		
Witness fees, police court, 1890.....	1,732.50		
Witness fees, police court, 1889.....	962.50		
Total.....		9,695.00	
Repairs to building and furniture of police court, 1891.....		1,092.11	
Rent of property adjoining the police court, 1891.....		421.66	
Constructing cells at police court, 1891.....		3,440.08	
Contingent expenses of police court, 1890.....	425.70		
Contingent expenses of police court, 1889.....	491.87		
Total.....		917.57	
Defending suits in claims against the District in Court of Claims, 1891.....		1,000.00	
Judicial expenses, 1891.....		762.99	
Writs of lunacy, 1891.....	2,000.00		
Writs of lunacy, 1890.....	6.75		
Total.....		2,006.75	
Pay of referees in Court of Claims, 1890.....	1,680.00		
Pay of referees in Court of Claims, 1885.....	380.00		
Total.....		2,060.00	
To pay the register of wills for preparing appointments of guardians for indigent boys, to enable them to enlist in the United States Navy, 1891.....		56.43	
Completion of administration and guardian dockets in the office of the register of wills, 1891.....		825.00	
Aggregate for courts and judicial expenses.....			37,044.89
PAYMENT OF JUDGMENTS.			
Judgments, act March 3, 1891.....		37,189.86	
Judgments, act September 30, 1890.....		41,034.38	
Interest on 3.65 bonds issued in payment of judgments against the District of Columbia in the Court of Claims, 1891.....		25,286.12	
Aggregate for judgments, etc.....			103,510.36
PUBLIC SCHOOLS.			
Pay of officers, teachers, and janitors, 1891.....		600,919.04	
Contingent expenses, 1891.....	29,655.15		
Contingent expenses, 1890.....	1,611.12		
Contingent expenses, 1889.....	2,236.43		
Contingent expenses, 1888.....	1.40		
Total.....		33,504.10	
Fuel, 1891.....	26,864.60		
Fuel, 1890.....	3,069.71		
Fuel, 1889.....	1,872.15		
Total.....		31,806.46	
Repairs to buildings and grounds, 1891.....	21,494.45		
Repairs to buildings and grounds, 1890.....	743.95		
Total.....		22,238.40	

D.—Statement of expenditures of the government of the District of Columbia from July 1, 1890 to June 30, 1891—Continued.

Appropriations.	Detail.	Total.	Aggregate.
PUBLIC SCHOOLS—continued.			
Rent of buildings and schoolrooms, 1891	\$9,892.00		
Rent of buildings and rooms, 1890	25.00		
Total		\$9,917.00	
Expenses of manual training, 1891	9,934.50		
Expenses of manual training, 1890	105.08		
Total		10,039.58	
Expenses of night schools, 1891		516.62	
Furniture for new buildings, 1890		1,118.87	
Fire escape at the Webster school building, 1889		230.00	
Aggregate for support of schools			\$710,290.07
BUILDINGS AND GROUNDS FOR PUBLIC SCHOOLS.			
Building in second division, 1891-'92		56.12	
Purchase of site and erection of building at Brookland, 1891-'92		16.00	
Purchase of site and erection of building in eighth division, 1891-'92		4.12	
Purchase of site and erection of building in third division, 1891-'92		8,494.63	
Purchase of site and erection of building in sixth division, 1891-'92		9,041.13	
Erection of high school building on site of the Wallach building, third division, 1891-'92		2,273.20	
Erection of colored high school building, 1891		52,723.07	
Erection of building at Anacostia, sixth division, 1891		24,752.38	
Purchase of sites and erection of buildings in first, third, seventh, and eighth divisions, 1891		122,974.61	
Purchase of site and erection of building in sixth division, 1890		459.50	
Purchase of sites and erection of buildings in first, fifth, seventh, and eighth divisions, 1890		656.71	
Purchase of site and erection of building in sixth division, 1889		11.16	
Purchase of ground in square numbered 276, 1891		6,750.00	
Inclosing the grounds of the Arthur building, 1891		1,592.74	
Aggregate for school buildings and grounds			230,205.37
HEALTH DEPARTMENT.			
Pay of employes, 1891		24,485.07	
Collection and removal of garbage, 1891	21,819.49		
Collection and removal of garbage, 1890	4.50		
Total		21,823.99	
Rent of office and stable, 1891		840.00	
Prevent the spread of scarlet fever and diphtheria, 1891		1,089.41	
Contingent expenses, 1890		749.45	
Aggregate for health department			48,987.92
MILITIA.			
Fuel, rent, light, care of armories for eight battalions, 1891	9,995.18		
Fuel, rent, light, and care of armories, 1890	8,049.38		
Fuel, rent, light, and care of offices, storerooms, etc., 1891	1,498.93		
Total		19,543.49	
Care of rifle gallery, 1891		1,198.80	
For lockers, gun racks, and furniture, 1891	1,499.50		
For lockers, gun racks, and furniture, 1890	5,134.04		
Total		6,633.54	
Printing blank forms and books, 1891	271.32		
Printing, expenses of parades, and instructions, etc., 1891	247.70		
Printing orders, etc., 1891	104.50		
Total		623.52	
Music, horses for parades, and inspections, 1891		799.00	
Clearing camp grounds, rifle range, etc., 1891		3,357.98	
Cleaning, repairing, and altering uniforms, 1891		149.55	
Repairs to roads, 1891		499.19	
Freight and transportation, 1891		642.11	

58 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

D.—Statement of expenditures of the government of the District of Columbia from July 1, 1890, to June 30, 1891—Continued.

Appropriations.	Detail.	Total.	Aggregate.
MILITIA—continued.			
Building rifle range, 1891		\$599.38	
Labor and teams, breaking camp, 1891		350.00	
Repairs to roofs, gutters, etc., 1891		699.93	
Building cook house, 1891		494.81	
Building stable sheds, 1891		391.00	
Roofing mess shed, 1891		184.80	
Mess furniture, 1891		1,499.78	
Tent floors, 1891		494.70	
Clearing and mowing grounds, 1891		198.26	
Hire of cooks, waiters, and laborers, 1891		448.25	
Ice, vegetables, milk, and butter, 1891		298.80	
Hire of horses, 1891		820.00	
Music 1891		744.00	
Incidental expenses, 1891		249.82	
Cost of annual encampment, 1890		5,550.55	
Aggregate for militia			\$46,473.26
MISCELLANEOUS EXPENSES.			
Emergency fund, for use in cases of riot, pestilence, calamity by flood or fire, and for other emergencies, 1891	\$1,006.32		
Emergency fund as above, 1890	763.52		
Emergency fund as above, 1889	6.59		
Total		1,776.43	
Compilation of the laws, 1891	919.93		
Compilation of the laws, 1890	10.59		
Total		930.52	
Harbor and river front, 1891	3,470.97		
Harbor and river front, 1890	49.45		
Total		3,520.42	
Repairs to pumps, 1891	3,714.08		
Repairs to pumps, 1890	177.84		
Repairs to pumps, 1887	5.00		
Total		3,896.92	
Repairs to hay scales, 1891	47.77		
Repairs to hay scales, 1889	26.00		
Total		73.77	
Printing, checks, damages, etc., 1891	53.64		
Printing, checks, damages, etc., 1890	1,876.27		
Printing, checks, damages, etc., 1889	757.54		
Total		2,687.45	
Care of morgue, 1891		300.00	
Building public bathing beach, 1891		680.86	
Rent of property yards, 1891	300.00		
Rent of property yards, 1890	75.00		
Total		375.00	
National Zoölogical Park, maintenance of, 1891	75,700.00		
National Zoölogical Park, purchase of land for, 1890	41,964.57		
Total		116,664.57	
Washington Aqueduct, engineering and maintaining, 1891		20,000.00	
Expenses of assessing real property, 1889		501.90	
To pay William Forsyth for surveying, 1889		350.00	
Deficiency in sale of bonds retained from contractors		2,815.36	
Payments on account of Rock Creek Park, 1891		92,000.00	
Aggregate for miscellaneous items			246,573.20
INTEREST AND SINKING FUND.			
Interest and sinking fund on District bonded indebtedness, 1891			1,213,947.97
CHARITIES AND REFORMATORIES.			
Washington asylum:			
Pay of employes, 1891	13,408.47		
Pay of employes, 1890	23.48		
Contingent expenses, 1891	43,838.63		
Contingent expenses, 1890	5,084.90		

D.—Statement of expenditures of the government of the District of Columbia from July 1, 1890, to June 30, 1891—Continued.

Appropriations.	Detail.	Total.	Aggregate.
CHARITIES AND REFORMATORIES—continued.			
Washington asylum—continued.			
Raising magazine building, 1891.....	\$43. 61		
Addition to workhouse, 1891.....	5, 842. 40		
New roof for workhouse, 1891.....	550. 00		
New ward, 1891.....	4, 200. 00		
Total.....		\$72, 991. 49	
Transportation of paupers and prisoners, 1891.....	2, 995. 31		
Transportation of paupers and prisoners, 1890.....	354. 39		
Total.....		3, 349. 70	
Relief of the poor, medicines, and medical attendance, 1891.....	14, 235. 10		
Relief of the poor, medicines, and medical attendance, 1890.....	661. 00		
Relief of the poor, support of indigent persons, 1891.....	5, 150. 00		
Total.....		20, 046. 10	
Hospital for the Insane, support of the insane, 1891.....	80, 208. 34		
Hospital for the Insane, support of the insane, 1890.....	7, 083. 33		
Total.....		87, 291. 67	
Reform School, support of inmates, 1891.....	40, 732. 53		
Reform School, support of inmates, 1890.....	424. 70		
Total.....		41, 157. 23	
Industrial Home School, 1891.....		13, 500. 00	
Columbia Hospital for Women and Lying-in Asylum, 1891.....		20, 000. 00	
Women's Christian Association, 1891.....		4, 000. 00	
National Association for Colored Women and Children, 1891.....		12, 000. 00	
Children's Hospital, 1891.....		10, 008. 00	
St. Ann's Infant Asylum, 1891.....		6, 500. 00	
German Orphan Asylum, 1891.....		6, 000. 00	
St. John's Church Orphanage Association, 1891.....		1, 500. 00	
Washington Hospital for Foundlings, 1891.....		7, 000. 00	
Association for Works of Mercy, 1891.....		8, 042. 00	
National Homeopathic Hospital Association, 1891.....		12, 000. 00	
National Temperance Home, 1891.....		2, 500. 00	
St. Rose Industrial School, 1891.....		2, 500. 00	
House of the Good Shepherd, 1891.....		3, 000. 00	
Columbia Institution for the Deaf and Dumb, 1891.....		10, 500. 00	
Building for the Central Dispensary and Emergency Hospital, 1891.....		100. 62	
Support of convicts, 1891.....	20, 712. 20		
Support of convicts, 1890.....	5, 258. 70		
Support of convicts, 1889.....	5, 076. 90		
Total.....		31, 047. 80	
Education of feeble-minded children, 1891.....		2, 450. 60	
Aggregate for charities and reformatories.....			\$377, 485. 21
WATER DEPARTMENT.			
Pay of employes, 1891.....	35, 664. 97		
Pay of cast-iron pipe inspectors, 1891-'92.....	189. 00		
Pay of cast-iron pipe inspectors, 1891.....	938. 00		
Total.....		36, 791. 97	
Services making water-rent books.....		462. 00	
Contingent expenses, 1891.....	2, 027. 92		
Contingent expenses, 1890.....	428. 79		
Contingent expenses, 1889.....	62. 15		
Contingent expenses, 1888.....	16. 25		
Contingent expenses, 1887.....	23. 24		
Total.....		2, 558. 35	
General expenses, pipe distribution, etc., 1891.....	60, 928. 60		
General expenses, pipe distribution, etc., 1890.....	3, 985. 19		
General expenses, pipe distribution, etc., 1887.....	5. 00		
Total.....		64, 918. 79	
Interest and sinking fund on water stock bonds, 1891.....	44, 610. 00		
Interest on account for increasing water supply, 1891.....	26, 227. 87		
Sinking fund on account for increasing water supply, 1891.....	43, 763. 26		
Total.....		114, 601. 13	
Refunding erroneously paid water rent, etc.....		1, 279. 98	
Aggregate for water department.....			220, 612. 22

60 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

D.—Statement of expenditures of the government of the District of Columbia from July 1, 1890 to June 30, 1891—Continued.

Appropriations.	Detail.	Total.	Aggregate.
SPECIAL AND TRUST FUNDS.			
Contractors' guaranty fund, act June 11, 1878.....		\$47,449.58	
Refunding erroneously paid taxes and licenses.....		14,106.87	
Washington special-tax fund.....		1,674.99	
Redemption of tax-lien certificates.....		1,138.76	
Redemption of assessment certificates.....		181.75	
Washington redemption fund.....		4,264.56	
Policemen's relief fund.....		10,569.43	
Firemen's relief fund.....		1,521.42	
Aggregate for special and trust funds.....			\$80,907.36
Aggregate expenditures for the fiscal year ended June 30, 1891.....			5,814,237.86

The above expenditures may be classified as follows:

From United States appropriations.....	\$2,756,359.14
From revenues of the District of Columbia.....	2,770,466.01
From water fund of the District of Columbia.....	220,612.22
From special and trust funds.....	66,800.49
Aggregate.....	5,814,237.86

E.—Statement of deposits and disbursements by the Commissioners on account of general expenses of the District of Columbia for the fiscal year ended June 30, 1891.

On what account.	Detail.	Total.	Aggregate.
DEPOSITS.			
Balance to the credit of the Commissioners of the District of Columbia with the Treasurer of the United States July 1, 1890.....		\$254,132.53	
Amounts advanced by the Secretary of the Treasury upon requisition by the Commissioners of the District of Columbia and deposited with the Treasurer of the United States on account of—			
General expenses of the District of Columbia.....	\$4,407,794.19		
Refunding erroneously paid taxes.....	12,000.00		
Water fund.....	129,840.08		
Contractors' guarantee fund.....	49,115.38		
Washington special-tax fund.....	1,500.00		
Washington redemption fund.....	4,870.88		
Redemption of tax-lien certificates.....	1,000.00		
Redemption of assessment certificates.....	1,524.13		
Policemen's relief fund.....	10,664.77		
Firemen's relief fund.....	1,521.42		
		4,619,830.85	
			\$4,873,963.38
DISBURSEMENTS.			
Amount of disbursements by checks of the Commissioners of the District of Columbia on the Treasurer of the United States on account of—			
General expenses of the District of Columbia.....	3,889,681.76		
Refunding erroneously paid taxes.....	14,106.87		
Water fund.....	105,984.09		
Contractors' guarantee fund.....	47,449.58		
Washington special-tax fund.....	1,674.99		
Washington redemption fund.....	4,264.56		
Redemption of tax-lien certificates.....	1,138.76		
Redemption of assessment certificates.....	181.75		
Policemen's relief fund.....	10,569.43		
Firemen's relief fund.....	1,521.42		
		4,076,573.21	

E.—Statement of deposits and disbursements by the Commissioners on account of general expenses of the District of Columbia, etc.—Continued.

On what account.	Detail.	Total.	Aggregate.
DISBURSEMENTS—continued.			
Amount of unexpended balances of requisitions repaid to appropriations to close accounts of Commissioners Douglass, Hine, and Robert on account of—			
General expenses of the District of Columbia.....	\$477, 794. 38		
Refunding erroneously paid taxes.....	759. 92		
Water fund.....	26, 698. 91		
Washington special-tax fund.....	1, 594. 05		
Washington redemption fund.....	371. 83		
Redemption of tax-lien certificates.....	1, 603. 51		
Redemption of assessment certificates.....	800. 50		
Policemen's relief fund.....	3. 67		
		\$509, 626. 77	\$4, 586, 190. 98
Balance to the credit of the Commissioners of the District of Columbia with the Treasurer of the United States, June 30, 1891, subject to check, the same being unexpended balances of requisitions.....			287, 763. 40

F.—Statement of receipts and requisitions on account of special and trust funds for the fiscal year ended June 30, 1891.

Water fund:			
Receipts—			
Collections deposited in the United States Treasury.....		\$272, 495. 01	
Requisitions—			
Requisitions by the Commissioners of the District of Columbia upon the United States Treasury.....		193, 230. 08	
Balance in the United States Treasury June 30, 1891.....		79, 264. 93	
Contractors' guarantee fund:			
Receipts—			
Balance in the United States Treasury July 1, 1890.....	\$3, 915. 15		
Proceeds of sales of bonds by the Treasurer of the United States.....	45, 200. 23		
		49, 115. 38	
Requisitions—			
Requisitions by the Commissioners of the District of Columbia upon the United States Treasury.....		49, 115. 38	
Washington special-tax fund.			
Receipts—			
Balance in United States Treasury July 1, 1890.....	\$8, 960. 54		
Collections deposited in United States Treasury.....	660. 37		
Repayment deposited in United States Treasury.....	1, 594. 05		
		11, 214. 96	
Requisitions—			
Requisition by the Commissioners of the District of Columbia upon the United States Treasury.....		1, 500. 00	
Balance in the United States Treasury June 30, 1891.....		9, 714. 96	
Washington redemption fund:			
Receipts—			
Balance in United States Treasury July 1, 1890.....	\$1, 096. 89		
Collections deposited in United States Treasury.....	3, 561. 96		
Repayment deposited in United States Treasury.....	371. 83		
		5, 030. 68	
Requisitions—			
Requisitions by the Commissioners of the District of Columbia on the United States Treasury.....		4, 870. 88	
Balance in the United States Treasury June 30, 1891.....		159. 80	
Redemption of tax-lien certificates:			
Receipts—			
Balance in United States Treasury July 1, 1890.....	\$1, 523. 98		
Collections deposited in United States Treasury.....	741. 68		
Repayment deposited in United States Treasury.....	1, 603. 51		
		3, 869. 17	
Requisitions—			
Requisitions by the Commissioners of the District of Columbia on the United States Treasury.....		1, 000. 00	
Balance in the United States Treasury June 30, 1891.....		2, 869. 17	

62 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Remption of assessment certificates:

Receipts—

Balance in United States Treasury July 1, 1890.....	\$63. 64
Collections deposited in United States Treasury.....	694. 43
Repayment deposited in United States Treasury.....	800. 50

\$1, 558. 57

Requisitions—

Requisitions by the Commissioners of the District of Columbia on the United States Treasury

1, 524. 13

Balance in the United States Treasury June 30, 1891

34. 44

Policemen's relief fund:

Receipts deposited with the Treasurer of the United States—

Balance July 1, 1890	\$142. 36
Interest on bonds collected	1, 097. 00
Proceeds of sale of bonds	3, 967. 94
Proceeds of sale of captured and abandoned property	281. 58
Fines collected	1, 065. 37
Amount retained from pay of policemen	4, 812. 05
Amount of repayment	3. 67

11, 369. 97

Requisitions—

Requisitions by the Commissioners of the District of Columbia upon the United States Treasury

10, 664. 77

Balance with the Treasurer of the United States June 30, 1891

705. 20

Firemen's relief fund:

Receipts deposited with the Treasurer of the United States—

Balance July 1, 1890.....	\$176. 92
Interest on bonds collected.....	88. 00
Fines collected.....	90. 00
Amount retained from pay of firemen.....	1, 520. 17

1, 875. 09

Requisitions, etc.—

Requisitions by the Commissioners of the District of Columbia upon the United States Treasury

1, 521. 42

Purchase of bonds by the Treasurer of the United States.....

180. 75

1, 702. 17

Balance with the Treasurer of the United States June 30, 1891

172. 92

OFFICE OF THE AUDITOR,
DISTRICT OF COLUMBIA,
Washington, D. C., October 3, 1891.

GENTLEMEN: I have the honor to submit the following estimate of the expenses of this office for the fiscal year ending June 30, 1893:

One auditor.....	\$3, 000
One chief clerk	1, 800
One bookkeeper	1, 800
One clerk.....	1, 600
Two clerks, at \$1,400 each.....	2, 800
Four clerks, at \$1,200 each	4, 800
One messenger.....	600
Contingent expenses, including new general journal and ledger.....	350
Total	16, 750

The plan of paying laborers in cash, and upon the line of their works, which has been followed since the opening of the present fiscal year, has proved of great benefit to this class of employés, but by lessening the force in the office seriously embarrasses the work. I am therefore compelled to ask for four clerks at \$1,200, instead of three as at present, the additional clerk to be charged with the duties heretofore performed by the clerk promoted to be disbursing officer. This, it will be observed, does not really make an increase in the force of the office, which would still be the same that it has been since 1884.

Very respectfully,

J. T. PETTY,
Auditor, District of Columbia.

E.

REPORT OF THE ATTORNEY.

OFFICE OF THE ATTORNEY FOR THE
DISTRICT OF COLUMBIA,
Washington, D. C., November 30, 1891.

GENTLEMEN: Pursuant to a time-honored custom and the requirements of the Commissioners of the District of Columbia, I have the honor to submit for their consideration the following statement of the business affairs of this office for the year ending June 30, 1891.

The scope of official duty pertaining to this branch of the municipal government is quite large, extending to the care and management of all litigation in the supreme court of the District and of the United States wherein the District of Columbia is an interested party; to all offenses in violation of the ordinances of the municipality falling within the jurisdiction of the police court; to all cases arising under the act of Congress relative to indigent insane persons; to the preparation of all tax deeds to be executed by the Commissioners of the District; to proceedings in condemnation of property for rights of way in the District of Columbia; to the examination of such legal questions as are submitted from time to time to this office by the Commissioners, arising out of the administration of their executive duties, and a preparation of opinions thereon; to the examination and determination as to the sufficiency of titles to real property acquired by the District as school sites, and for the construction of sewers, and to all other cases wherein the rights of the District to real property may be questioned.

The great accumulation of cases upon the calendars of the supreme court of the District has necessarily retarded the trial and disposition of the court business in which the District is interested; nevertheless, many important cases have been disposed of within the period of time covered by this report. To the more important of these cases I now call your attention.

The so-called commercial drummer cases, which involved a large amount of money, stand at the present time barred by the statute of limitations, which will remain final unless Congress shall intervene and by legislation remove this bar. It should be stated, however, in this connection, that a limited number of these cases have been settled and judgments obtained under a stipulation made by my predecessor with the parties in interest that their suits should abide the event of the decision of the Supreme Court of the United States in the well-known case of *Stoutenburgh vs. Hennick*, reported in 129 U. S., at page 142. The Commissioners have already reported to Congress the approximate amount of money that it would take to satisfy the amount claimed in the cases now barred by the statute of limitations.

The case of Hutton against the District, which involves the validity of the restrictions placed upon the appointing power of the Commission-

ers as to the police force, under section 354, Revised Statutes of the District of Columbia, is pending in the Supreme Court of the United States on appeal from the supreme court of the District, to be disposed of without delay upon the briefs of the parties, as is understood by this office.

The case of the First National Bank of New York, with which you are familiar, was, under the instructions of the Commissioners, settled by the withdrawal of the plea of the statute of limitations, and the amount found to be due the bank upon the report of the chief of the special assessment division ordered to be paid and satisfied in drawback certificates.

I take great pleasure in reporting to you the final determination of the long-drawn-out litigation relative to the character of the streets in Le Droit Park. This litigation terminated in the decree which was entered by the supreme court of the District in the case of Fairman against the District, and in what was commonly known as the "Le Droit Park fence case." This case presented the anomaly of a public street within that Park barricaded by a fence between blocks of houses, built up and torn down from time to time by contending factions, out of which many suits were instituted in the courts, and on account of which much ill feeling was engendered, which threatened the peace and prosperity of that portion of the capital city, creating also much embarrassment to the Commissioners of the District in the expenditure of public moneys for its safety and improvement. It is a subject of congratulation that this controversy has been ended by a decree of the supreme court, which establishes forever the public character of the streets of Le Droit Park.

Cases of minor importance have also been disposed of during the year, to which I do not deem it important to call your attention or occupy your time, except it be to add that much labor and work has been performed by the office, and more especially by my third assistant, in the disposition of a large volume of lunacy cases before the marshal of the District and a jury, as required by law.

Next, I respectfully call the attention of the Commissioners to the pending business of this office still undisposed of.

There are cases pending involving the rights of individuals to institute proceedings for the enforcement of mechanic liens against the property of the municipality, in the construction of schoolhouses belonging to the District.

Cases brought against the District for personal damages for injuries alleged to have been caused by the negligence of the District on account of defective streets, while constructing water mains and sewers, and on account of alleged defects in the sidewalks of the city.

Two important cases involving the validity of proceedings instituted for the purpose of opening streets, that of T street being one, and Sixteenth street extended being another.

Also, two cases involving the right of the Commissioners to erect schoolhouses within 200 feet of saloons. These are the more important of pending cases, and all that I deem necessary to mention at the present time.

Since my last report was submitted for your consideration Congress has passed the act of March 3, 1891 (Vol. 26, p. 484), defining the jurisdiction of the police court of the District of Columbia. I think that the wisdom of this law has been successfully vindicated during the past year, and that the introduction of the jury system as a part of

the machinery of that court has proved of great advantage in the prompt and efficient enforcement of the District laws.

The records of that court show that during the period covered by this report the payment of fines imposed in District cases amounts to \$34,837.20, being an increase of nearly \$3,000 of cash received over the preceding year, as reported to me by my assistant in charge of the business of that court; that the number of cases tried in that court for the violation of the laws and ordinances of the District during the year is 11,798; and the classes of offenses from which this revenue has been derived are as follows:

Enticing prostitution in county; profane and indecent language; disorderly conduct, Washington, Georgetown, and county; keeping unlicensed bar; selling liquors to minors; selling liquors without license; illegal sales of liquors by druggists; selling liquors after hours; selling liquors to soldiers, inmates of Soldiers' Home; barber shops open on Sunday; shops open on Sunday; fast driving, colliding with vehicles; colliding with persons; bicycles without light or without bell; concealed weapons; indecent exposure; throwing missiles; trespass on parks and on parkings; cruelty to animals; dumping dirt on streets, etc.; discharging firearms; shooting fire crackers; driving on pavements; barking dogs; driving cattle through the streets; wasting Potomac water; refusing to aid officers making arrests; obstructing sidewalks; keeping goods on streets longer than an hour; selling unwholesome food; obstructing admittance to water inspectors; violation of market ordinances; playing ball in streets; bathing in rivers; shooting under and near bridges; fast driving over bridges by street cars and others; stoning street cars; fast driving; selling fireworks without license; unlicensed auctioneers; unlicensed junk dealers; unlicensed livery stables; unlicensed entertainments; unlicensed peddlers; driving through funeral and other processions; obstructing streets with push carts; permitting wagons, etc., to stand in streets and alleys; obstructing alleys with gates, etc.; throwing and sweeping refuse on streets; crowing and troublesome chickens; contempts of court; keeping cow yards; light-weight bread; selling vegetables by measure; refusing to pay hack hire; vehicles loitering and soliciting fares away from stands; vehicles soliciting fares on Sunday; injuring trees; breaking lamps and posts; injuring and destroying private property; injuring and defacing public property, including monuments; public buildings, etc.; unlicensed wagons; excavations in streets, etc.; excavations in streets without permit; excavations and obstructions unprotected by lights or fences; violations of building regulations; violations of police regulations; violation of hack-law regulations; violation of health ordinances and regulations; violation of plumbing regulations; violations of hotel and restaurant regulations; violation of sundry ordinances; vagrancies.

To render the work of this important court still more efficient, Congress, in my judgment, should enact into law the bill entitled "For the preservation of the public peace," which was reported favorably by the Senate Committee on the District of Columbia, and which failed to be passed by that body evidently for want of time; a bill which simplifies and unifies the various ordinances of the District which fall under the title given to the bill, and makes them applicable to the present demands of the District, and which was the subject of careful revision by this office, in connection with Judge Miller of the police court.

In closing this, my report, I desire to acknowledge my obligation to those associated with me in the office as assistants for the faithful and able support which they have given my administration of its affairs;

and, whatever may be the result of a recommendation that the salaries of the office be increased, I deem it an act of justice to say that the salaries allowed by law to the assistant having charge of the business of the police court, and my assistant, termed in the statute "law clerk," being only \$1,200 in each case by the year, and the salary of the messenger of the office \$200 a year, are in no way commensurate with the duties performed by these officers, and very far below what they ought to be as compared with other employes of the District and the Government.

All of which is respectfully submitted.

GEO. C. HAZELTON,
Attorney for the District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

Estimate of the amount required for the conduct and support of the office of the attorney of the District of Columbia for year 1892-'93.

One attorney	\$4, 800
One assistant attorney	2, 800
One special assistant attorney	2, 000
One law clerk, or third assistant attorney	2, 000
One messenger	600
Rent of office	600
Contingent expenses, including books, stationery, printing, and other necessary items	500
Judicial expenses, including printing of briefs and witnesses' fees in District cases before the supreme court of the District of Columbia	3, 000
Total	<u>16, 300</u>

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County.

County.

MAP
OF THE

CITY OF WASHINGTON

County.

Potomac River.

Anacostia River.

County.

Police District Area,
72 $\frac{2}{3}$ Sq. Miles.

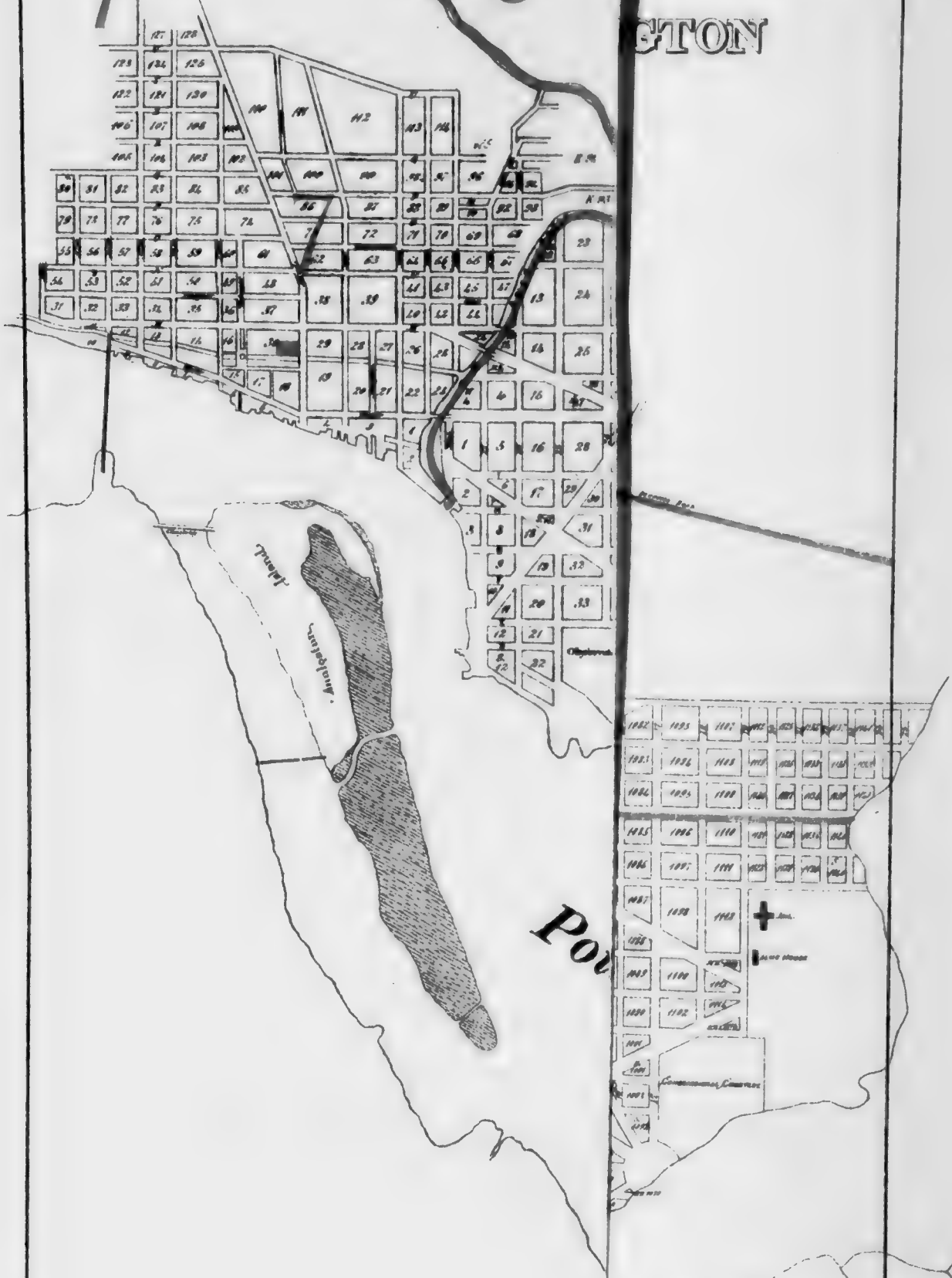
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Police

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County.

Police District Area,
72 $\frac{8}{10}$ Sq. Miles.

Am. T. O'Brien
1907
New York City

D C 52 1

F.

REPORT OF THE MAJOR AND SUPERINTENDENT OF THE METROPOLITAN POLICE DEPARTMENT.

DEPARTMENT OF METROPOLITAN POLICE,
Washington, D. C., July 1, 1891.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA:

GENTLEMEN: I have the honor to submit the following estimate of the amount required for the conduct and support of this department for the fiscal year ending June 30, 1893, together with a detailed statement of its operations for the fiscal year which terminated June 30, 1891:

One major and superintendent.....	\$3,300
One captain.....	1,800
Two lieutenants, inspectors, at \$1,500 each.....	3,000
One chief clerk, who shall also be property clerk.....	1,800
One clerk.....	1,500
Two clerks, at \$900 each.....	1,800
Four surgeons, for the police and fire departments, at \$540 each.....	2,160
Additional compensation for 12 privates detailed for special service in the detection and prevention of crime.....	2,880
Nine lieutenants, at \$1,320 each.....	11,880
Thirty-two sergeants, at \$1,140 each.....	36,480
Two hundred and twenty-five privates, class 1, at \$900 each.....	202,500
One hundred and ninety privates, class 2, at \$1,080 each.....	205,200
Twenty station keepers, at \$720 each.....	14,400
Ten laborers, at \$480 each.....	4,800
One messenger.....	700
One messenger.....	500
One major and superintendent, mounted.....	240
One captain, mounted.....	240
Thirty-nine lieutenants, sergeants, and privates, mounted, at \$240 each.....	9,360
One van driver.....	360
One ambulance driver.....	480
Two assistant ambulance drivers, at \$300 each.....	600
Thirteen drivers of patrol wagons, at \$360 each.....	4,680
Three police matrons, at \$600 each.....	1,800
Rent of police headquarters and substation at Anacostia.....	1,200
Fuel.....	2,500
Repairs to stations and stables.....	3,000
Miscellaneous and contingent expenses, including stationery, books, telegraphing, photographing, printing, binding, gas, ice, washing, meals for prisoners, furniture and repairs thereto, beds and bed clothing, insignia of office, purchase and care of horses, police equipments and repairs to same, harness, forage, repairs to vehicles, van, ambulances, and patrol wagons, and expenses incurred in the detection and prevention of crime, and other necessary items.....	19,360
One light wagon and harness, for patrol service.....	300
Erection of stable for ambulances and horses.....	6,000
Additional story to second precinct station house, enlarging cell room, and increasing number of cells.....	7,500
Total.....	\$552,320

INCREASES.

These estimates are \$33,097 in excess of the appropriations for the current fiscal year, and propose the following additions to the employes of this department:

One clerk.....	\$900
Two sergeants, at \$1,140 each	2,280
One sergeant, mounted.....	240
Twenty privates of class 1, at \$900 each	18,000
Twenty privates of class 2, at \$1,080 each.....	21,600
One laborer.....	480
Three patrol drivers, at \$360 each	1,080
	\$44,580
Increase in miscellaneous items:	
Fuel \$300, repairs to stations \$500, contingent expenses \$3,360..	\$4,160
Difference between cost of patrol wagon and light wagon.....	143
	4,017
Decrease for buildings	48,597
	15,500
Total increase	\$33,097

CLERICAL ASSISTANCE.

The appropriations for this department make provision for only three clerks. The chief clerk is burdened not only with the duties of that position, but also holds the responsible office of property clerk. The time of the \$1,500 clerk (who is a stenographer) is almost entirely occupied in reporting the proceedings of the trial committee, while the \$900 clerk has for years been detailed for service with the assessor of the District of Columbia. A prompt and proper transaction of business has for some time necessitated the employment at desk work in this office of a station-keeper and three policemen, for while within the past 6 years the force has been increased 56 per cent. and the work about 33 per cent., no allowance has been made for proportional clerical assistance. Application is therefore made for another clerk, at a yearly salary of \$900.

INADEQUATE FORCE.

The estimates provide for an addition to the force of 2 sergeants (1 to be mounted), 20 privates of class 1, and 20 privates of class 2. There are now 30 sergeants and 2 acting sergeants; the full rank should be given to the latter in justice to them and in the interests of discipline. The growth in the number of mounted men requires that another sergeant should be mounted, in order that a due performance of duty may be enforced both day and night in the county portion of the District.

An increase in the number of privates is indispensable to an effective administration of this department. In the first precinct at least 3 men are withdrawn from their beats on alternate days to protect from disorder the large gatherings at the Washington Market, and to regulate the many vehicles which assemble in the adjoining streets. Two men should also be provided for duty in the grounds south of the Executive Mansion and the parks attached to the Smithsonian Institution and the Department of Agriculture.

Four more privates are necessary for the establishment in the second precinct of another beat between First street east and First street west,

where the police always find active work, and should be present in sufficient numbers to prevent turbulence.

In the third and fourth precincts the reclaimed lands along the river front have become the resort of disreputable characters, who there hide stolen goods, and, sheltered by the underbrush, gamble and brawl without fear of molestation. It is believed that with 4 additional men in each of these precincts the "flats" could in a short time be reduced to a quiet orderly condition.

The bathing beach, although not yet completed, already calls for the services of 2 policemen. When finished, 3 will have to be present during the bathing season to preserve peace and protect property. It will be the resort of large numbers of persons of all classes and conditions, and can only become of public benefit by the absence of any and every disagreeable feature.

The lieutenant of the fifth precinct is urgent in his request for three more footmen. His jurisdiction covers an extensive area, and some of the beats are unquestionably too large to be efficiently patrolled, notably that which is bounded by East Capitol street, Fourteenth street southeast, and the Anacostia River, commonly known as the "bad lands."

In the sixth precinct there are now on day duty but seventeen men. Six more are needed, not only for the maintenance of good order and good morals in Judiciary Square and the parks south of Missouri avenue, but for better police attention to those important business thoroughfares, Pennsylvania avenue and Seventh street northwest.

Tennallytown, in the seventh precinct, has grown into considerable importance as the junction or terminus of three electric railroads. The travel over these lines during the summer months has been so great as to require the presence there of an officer during the day and until midnight. Two men should be added to the force for day and night duty at this place.

Four footmen are asked by the lieutenant of the eighth precinct, for use in the more important suburban villages, to which should be applied as early as possible the system of patrolling which exists within the city limits.

The ninth precinct, although embracing a large territory, in the number of men on duty constitutes the smallest command in the district. The extraordinary growth of this portion of the city since May, 1889, when it became the ninth precinct, has attracted general attention, and may to some extent be attributed to the better security afforded citizens and property by the location therein of a station house, with a distinct quota of men. The continued progress of improvements justifies the lieutenant's request for an addition to his command of four men.

As an illustration of the rapid development of the District, reference may be made to the report of the assessor, which shows that during the past year 1,652 houses were erected in Washington, 67 in Georgetown, and 502 in the county, a total of 2,221, at an assessable value of \$4,352,300. In round numbers there are now 45,000 houses in the District of Columbia.

Without more care than is now possible under existing appropriations, the beautiful public parks will become the lurking places of bad characters, and be more dangerous than attractive. From midnight until 4 a. m., in summer, and from midnight until 5 a. m., in winter, they are devoid of watchmen, and are left alone to inadequate police supervision.

70 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

DISTRIBUTION OF THE FORCE.

The entire police force of the District of Columbia on the 30th day of June, 1891, consisted of 408 men, namely: 1 major and superintendent, 1 captain, 2 inspectors, 9 lieutenants, 30 sergeants, and 365 privates.

Of the 395 sergeants and privates, there were, upon that date—

Sick or disabled	16
On leave	13
On post or special duty	63
Leaving for patrol duty	303

During the same 24 hours the greatest number of these performing a tour of duty was 137.

DETAILED.

The following shows the location of the men engaged in performing post or special duty :

Baltimore and Ohio depot	2	Market house	1
Baltimore and Potomac depot	2	Ninth and F streets, NW	2
District building	5	Patrol system	10
Detective office	8	Patrol steamer	3
Detective office night clerk	1	Precinct detectives	1
Executive Mansion	7	Police court	3
Free bridge	1	Post-office	1
Fifteenth street and New York avenue	1	Seventh street and Pennsylvania ave- nue	2
Headquarters, in charge at night	1	Wharves	1
Headquarters, clerks' office	3	Workhouse	4
Headquarters, sanitary office	1		
Health department	1		
Humane Society	1		
Hack inspector	1		
		Total	63

LABORER FOR HEADQUARTERS.

Another laborer, at \$480, is estimated for, as he is needed for service in this office, which is located in an old building not at all suitable for the purpose. It has not even the advantage of a furnace, but in cold weather reliance for comfort is upon stoves and latrobes. It is impossible to supply these with fuel with two messengers, whose time is occupied, not only with ordinary office duties, but in the conveyance of communications to the Commissioners, and of property, the evidences of crime, to the courts. At present nine laborers are in the employ of the department—one at each station house.

ALL-NIGHT PATROL WAGONS.

The appointment of three additional patrol drivers, at \$360 each, is contemplated in the estimates. The patrol wagon is now only available in the first precinct for day and night duty. In the other precincts, for want of a sufficient number of drivers and horses, the wagons are in dally use but 14 hours. It is desirable that the second, fourth, and sixth precincts, in which many arrests occur, should have two drivers each, in order that at all times the wagons may be subject to call. A policeman in either of those precincts would not then be compelled to leave his beat unguarded while conducting a prisoner to the station.

FUEL.

The proposed increase in miscellaneous items needs but brief explanation. For fuel, an increase of \$300 is asked, in view of the fact that 5 of the station houses have been enlarged, and the new building for the seventh precinct will, when completed, be the most capacious of all. A severe and long winter would, it is believed, cause a deficit in this particular appropriation should it be limited to the sum now granted.

REPAIRS TO STATIONS.

The amount asked for repairs to stations is in the interest of economy. Two more stables have been built during the year, and constant use of the stations by members of the force, of cell rooms by unruly prisoners, and of stables by one or more horses causes wear and tear which should be met by prompt repairs.

THE CONTINGENT FUND.

The estimates propose an increase of \$3,360 in the appropriations for miscellaneous and contingent expenses. Of this amount \$1,200 will be required to furnish the new station house in the seventh precinct, at least \$200 to furnish an additional story to the second precinct station, should an appropriation therefor be granted, and \$100 for gas for the additional rooms to be lighted in these buildings. Should the force be enlarged, as herein recommended, beds and bedding, revolvers, belts, badges, and other equipments will have to be purchased, at an average of about \$30 per man, aggregating for 42 men \$1,260. It should also be remembered that for some years past the appropriations for the extension of the police signal and telephone system have provided for horses, wagons, and harness. That system having been completed, they must hereafter be obtained from the contingent allowance. The wagons first purchased already give evidence of long and constant use, and add considerably to the outlay for repairs to vehicles. The number of horses has gradually grown from 1 in the first instance to 20 at the present time. It follows that greater expenditures will be incurred for harness and repairs, shoeing, and forage, the price of the latter having advanced to a higher figure than any heretofore paid.

AMBULANCE STABLE AND HOSPITAL.

It is now necessary, for want of any accommodations for sick and disabled horses, to put them in charge of the veterinary surgeon for treatment. The ambulances, which are kept in active use, are housed at the fourth precinct stable, as are also the van and a patrol wagon. The stable is overcrowded, and has not room for another stall; besides, its distance from the central office interferes with the prompt and satisfactory working of the ambulance service. To better this condition of affairs a stable, adapted to the care of invalid horses and of sufficient capacity for the ambulances, should be erected upon a lot, the property of the District, adjoining the second precinct station. The number of calls for ambulances during the year just closed was 1,731—191 more than during the previous 12 months.

DORMITORY FOR THE SECOND.

Like the first, fourth and sixth precincts, the second is located in a closely populated district, which is policed by 39 privates, under the supervision of a lieutenant and 3 sergeants. The sleeping apartment is 28 by 31 feet, and is not sufficiently large to accommodate the men who occupy it nightly. To insure health and comfort, a third story should be built, as has been done in the first, fourth, and sixth. It will be observed that the appropriation asked for this purpose also contemplates an enlargement of the prison room, which contains but 6 cells, often cruelly overcrowded. If another story is to be constructed, it would be in the line of economy as well as humanity to make provision for more cells.

INSUFFICIENT COMPENSATION.

The following changes in salaries are recommended, with the statement that if sanctioned they will involve a further annual expenditure of \$9,660, as the force is at present constituted, and of \$10,140 should Congress authorize the appointment of two additional sergeants and three more patrol drivers:

Of the captain, from \$1,800 to \$2,100; of the chief clerk, from \$1,800 to \$2,100; of the surgeons, from \$540 to \$600 each; of nine lieutenants, from \$1,320 to \$1,500 each; of the sergeants, from \$1,140 to \$1,200 each; of the station keepers, who in the estimates are designated station clerks, from \$720 to \$900 each; of the ambulance driver, from \$480 to \$600; of the assistant ambulance drivers, from \$300 to \$480 each; of the van drivers and the patrol drivers, from \$360 to \$480 each.

DISCIPLINE.

During the year 1890 the police trial board investigated 154 charges against members of the force. Of this number 59 cases were dismissed without prejudice, leaving 95 instances in which there was an infliction of penalty. The force for that year numbered 376 men. Congress made provision for 32 additional policemen for the year succeeding, making the total 408, against whom 181 charges were preferred, of which 44 were dismissed without prejudice to the officers concerned. These statistics are in most instances exceeded when compared with those of other large cities; and when the raw material, which to some degree composes the organization, as well as the compulsory law under which charges may be preferred, is considered, there is little room for comment. Under the manual, when complaints under oath are made against a police officer, he must be cited before the trial committee without further inquiry. This leaves the policeman subject to trial upon the slightest pretext, and in a large measure accounts for the extensive number of dismissals of accusations. The use of a weapon of defense by an officer is invariably followed by a charge of cruel treatment, and yet I can only recall one occurrence since December, 1886, in which the policeman was not sustained by the court. Public sentiment has much to do with the *morale* of a police force, and grateful acknowledgment is made of the encouragement received from this community, as manifested through the columns of the enterprising local press and other sources.

ARMY AND NAVY CLAUSE.

The report of the surgeons who make examination of the physical qualifications of candidates for the force shows the straits to which this department is subjected in obtaining men from the Army and Navy, as required by statute. The applicants during the year numbered 259, of whom 89 were accepted and 170 rejected—a percentage of 34.36 accepted and 65.63 adversely passed upon. Of the former many are unable to await vacancies, and reënlist or leave the city to seek other employment, while others, and not a few, are found deficient in education. So long as the law may exist that “no person shall be appointed as policeman who has not served in the Army or Navy of the United States and received an honorable discharge,” this department must labor under great embarrassment. It need not be said that the men who served the Government during the rebellion, for whose benefit the act was passed in 1867, are not eligible on account of age. It is true that the courts have been sought to relieve this condition of affairs, but the slow process of reaching decisions induces the oft-repeated recommendation for the repeal of a law which excludes from the police force the son of a veteran or any citizen, however deserving, unless he has received an honorable discharge from the military or naval establishment for services rendered in time of peace.

If this clause is to be continued, it would be sound policy to arrange with the War and Navy Departments that a record should be kept in each of good, worthy, and suitable men, from whom selections could be made to fill vacancies—subject however to the requirements of law and regulations. In supplying vacant places, delay, which might secure good men, would be preferable to prompt appointment solely upon an honorable discharge of one who might have been a good soldier, sailor, or marine, but who might not possess the qualifications essential for an efficient policeman.

INEBRIATE INSTITUTION.

The necessity for an asylum for inebriates has been heretofore presented, and it is hoped that provision may sooner or later be made for an institution for their treatment. Drunkenness in the District of Columbia is not an offense against the law. It is believed that were it made such, public drunkenness would in some measure be repressed, and the unseemly appearance of inebriates upon our streets be considerably lessened.

LOTTERY AND POLICY.

The act approved March 3, 1891, giving a jury to the police court and conferring upon that tribunal jurisdiction in misdemeanors, has enabled the department to prosecute more successfully lottery and policy cases, as is evidenced by the greater number of convictions. It is not so with the “club” gambling cases, which have to be investigated by the grand jury, as the maximum penalty, upon a conviction under the first section of the law, permits a sentence of over a year. It would be better if those offenses were classed the same as lottery cases, as I am not aware of a conviction where the maximum penalty has been

imposed. Owing to the pressure of other business, the United States attorney has been unable to bring to trial any of the cases, about twenty in number, pending before the grand jury and the criminal court.

PAWN AND JUNK SHOPS.

The new law regulating pawn shops and second-hand dealers is working very satisfactorily, as well in adding to the revenues of the District of Columbia as in assisting in the recovery of stolen goods. The law has been tested in the courts, and sustained. The second-hand dealers' law should be so amended as to reduce the license to \$5 per annum where the capital invested does not exceed \$10, so as to benefit persons who are engaged in gathering rags on the streets, the tax of \$40 amounting to a prohibition.

THE DISABLED AND DEFECTIVE.

The report of the sanitary officer deserves consideration. The expenditure for transportation during the year was \$1,879.21, 154 ex-soldiers and sailors and 23 "cranks" or suspicious persons being among the recipients of this fund. His recommendation that \$2,000 be specifically appropriated for this purpose, instead of being embraced in a common item for "transportation of paupers and conveying prisoners to the workhouse," should receive legal sanction. The appropriation for each purpose should be explicit, as transportation of paupers is furnished by this department, while the conveyance of prisoners to the workhouse is entirely under the control of the police court.

There were sent to the various hospitals for treatment 2,572 persons, 124 being from Virginia and 109 from Maryland.

The number of insane admitted to St. Elizabeth, the Government hospital, was 171, an increase of 5 over the previous year. In the absence of any means for caring for the insane pending legal process, they are confined in the station-houses, the same as offenders against the law. As suggested by the sanitary officer, "considerations of humanity demand that some fit and wholesome place be established for these unfortunate persons" while awaiting a legal determination of their status.

RELIEF OF THE POOR.

During the year 1891 there were the usual appeals for food and fuel from the sick and destitute. Among those who were granted aid were not a few whose despair has been repeated to the police winter after winter. There were mothers who managed to carry the burdens of a family through the heat of summer, but who could not contend against the cold, damp open winter and spring. In some instances disease and death added to their miseries. Many came with tears in their eyes to ask the means to keep shelter over themselves and families. With their pleas was the story of the drunken father and the deserted mother. The department has learned, however, that there is a large minority of deserving ones in the District, who, even in extreme need, are too proud to beg. Now and then such cases come to light through accident.

There was expended for the relief of the poor the sum of \$2,886.41, 128 disbursements being in cash and the remainder in orders for fuel and

provisions. A close estimate shows assistance to have been rendered to about 6,400 persons, or each man, woman, and child to have been relieved to the extent of about 45 cents. In nearly all cases aid was furnished through orders for food and fuel given by the several lieutenants upon various grocers and fuel dealers. There were contributed for the poor by citizens about \$300, all of which has not yet been expended.

PATROL SYSTEM.

The police-patrol system throughout the District of Columbia was completed and went into operation July 1, 1891. Its value as a police adjunct can not be overestimated.

MATRONS.

Congress wisely authorized the appointment of three police matrons. They have done excellent service in caring for lost children and female prisoners, and their presence in the stations has a beneficial influence in many ways.

HUMANE AGENT.

The report of the officer detailed as agent for the Humane Society is hereto appended. His recommendations for the better protection and education of children should receive careful attention, and in urging a reform school for girls he represents a strong and growing feeling in favor of the establishment of such an institution.

TIME LOST.

In 2,527 instances men were detained at the police court after 11 o'clock a. m., who should either have been on duty or taking needed rest. The time lost on account of sickness and other disabilities was 3,826 days.

CRIME IN THE DISTRICT.

The showing made by the police statistics for the fiscal year ending June 30, 1891, with reference to crimes and misdemeanors in the District of Columbia, is by no means discouraging. During that period there was a decided decrease in the commission of the higher crimes. There was no legislation put into effect making such commissions more heinous, lawyers were no more fertile in devices to clear their clients, and executions were less frequent. In fact, misdemeanors were punished with greater certainty than capital offenses. It is but reasonable, then, to infer that the police have been more energetic and cautious in carrying out the first duty laid down for them—the prevention and suppression of crime.

The table which is presented herewith will not prove uninteresting to those who have the welfare of the District in mind. It is given in order that the results of comparison with former years may be readily

seen, but it should not be forgotten that there has been a steady increase in population, and that the year 1889 witnessed the inauguration with its attending patrons, one about equalizing the other :

Cases held.	1891.	1890.	1889.	1888.	Remarks.
Abortion	3	.....	.....	1	Increase over 1890.
Affray	478	498	622	378	Decrease over 1890.
Arson	1	3	2	1	Do.
Assault	660	435	372	321	Increase over 1890.
Assault and battery,	837	1,243	1,125	1,254	Decrease over 1890.
Assaulting an officer	37	44	24	25	Do.
Attempt at rape	4	4	3	8	Do.
Bigamy	5	.....	6	3	Increase over 1890.
Buying stolen goods	1	.....	4	9	Do.
Conspiracy	8	.....	.....	9	Do.
Cohabiting with child under 16 years	2	2	.....	.....	Decrease over 1890.
Cruelty to animals	226	217	209	313	Increase over 1890.
Cruelty to children	2	4	4	4	Decrease over 1890.
Concealed weapons	194	176	170	154	Increase over 1890.
Creating nuisance	20	32	32	17	Decrease over 1890.
Disorderly conduct	4,180	3,874	2,491	1,905	Increase over 1890.
Destroying private property	89	55	53	76	Do.
Destroying public property	22	20	21	10	Do.
Enticing prostitution	12	11	11	10	Do.
Enticing child, etc	1	1	.....	1	Decrease over 1890.
Embezzlement	17	50	20	14	Do.
Exhibiting obscene pictures	2	.....	.....	2	Increase over 1890.
Fast driving	162	90	65	56	Do.
Forgery	11	24	8	27	Decrease over 1890.
Fugitives from parents	64	55	41	43	Increase over 1890.
Grand larceny	55	81	63	81	Decrease over 1890.
Habitual drunkard	60	60	41	41	Do.
Highway robbery	5	4	6	13	Increase over 1890.
Housebreaking, day	17	25	40	15	Decrease over 1890.
Housebreaking, night	52	81	57	87	Do.
Intoxication	3,636	3,515	3,481	3,865	Increase over 1890.
Intoxication and disorderly	1,118	1,201	1,010	955	Decrease over 1890.
Interference with officers	11	10	4	3	Increase over 1890.
Indecent exposure	232	237	157	199	Decrease over 1890.
Indecent assault	8	9	8	13	Do.
Keeping disorderly house	49	33	28	27	Increase over 1890.
Keeping bawdy house	18	26	21	28	Decrease over 1890.
Keeping gaming house, etc	49	15	13	9	Increase over 1890.
Larceny from person	45	27	47	26	Do.
Murder	7	13	17	15	Decrease over 1890.
False pretenses	39	38	40	7	Increase over 1890.
Perjury	3	1	6	4	Do.
Petit larceny	666	649	666	661	Do.
Profanity	1,009	1,204	1,192	1,204	Decrease over 1890.
Rape	10	5	3	0	Increase over 1890.
Receiving stolen goods	5	5	27	12	Decrease over 1890.
Selling lottery tickets	11	0	5	8	Increase over 1890.
Threats	244	262	287	275	Decrease over 1890.
Vagrancy	1,752	1,764	1,566	1,322	Do.
Violation building regulations	32	5	3	9	Increase over 1890.
Violation dog law	8	6	7	12	Do.
Violation gaming law	4	2	1	1	Do.
Violation policy law	187	111	35	79	Do.

A COMPARISON.

It will be observed in comparing last year's figures with those of the preceding year, and considering crime and misdemeanors of all kinds, that there were 29 increases and 24 decreases, the increases being for the lesser offenses, and the decreases being in affrays, arson, assault and battery, assaulting an officer, attempt at rape, cruelty to children, enticing child to prostitution, embezzlement, forgery, grand larceny, habitual drunkard, housebreaking, intoxication and disorderly, indecent assault, murder, profanity, receiving stolen goods, vagrancy, and threats. Comparing every character of crime and minor offense charged in 1891 with the same for the 3 years preceding, there is found a remarkable decrease in every kind of commission, excepting in assault cases, which

exceed the greatest number for any prior year by 225, and in concealed weapon cases, which exceed the highest number for the preceding years by 18. The failure of Congress to provide a penalty in keeping with the latter offense, as recommended by the chief clerk of this department a year ago, seems to have only emboldened "the hip-pocket gentlemen." Disorderly conduct increased all around 306 cases, as did the number of cases of destroying public and private property. There was one more case of enticing prostitution over the highest total for any of the former years, and 72 increase in the cases of fast driving. A few more children displayed a desire to forsake home and fireside; there was one additional case of interfering with an officer in the discharge of his duty, 16 increase under the charge of keeping a disorderly house, and 34 under the act to suppress gaming. The list of cases for selling lottery tickets was more numerous. With the few exceptions just named, there was a decided decrease; less murder by more than 50 per cent. over the largest number of cases in 4 years, and less stealing and intoxication.

These deductions are made from the daily morning reports of the police lieutenants, and with great accuracy, and they prove conclusively that, notwithstanding the manner in which the District Police department is handicapped by the multiplicity of laws, by the Army and Navy appointment clause, by a dilapidated headquarters building, by a diminutive fund for the detection and prevention of crime, it has succeeded in reducing crime and immorality to a minimum. Murder will continue to be committed, petty thieving will never be suppressed, drunkards and vagrants will continue to come and go, but that these evils are being gradually reduced is cause for reflection as well as congratulation.

Of the 25,166 cases of arrest, there were but 15,037 held for the action of the criminal court, or for which there was an infliction of penalty in the police court. This reduction was reached by 1,548 cases being nolle prosequied and 8,581 dismissed by the lieutenants, district attorneys, judges of the lower courts, and coroner, the first named exercising their prerogative in releasing all cases of intoxication, which alone numbered, as already stated, 3,636 cases. Where the dog law was violated, cases were dismissed on production of licenses, and so when unlicensed peddlers and hucksters were apprehended. There were numerous cases of suspicion and vagrancy where parties were alike acquitted. Of the whole number of cases of arrest and of cases held, 54 and a fraction per cent. were against colored persons. For this condition of affairs the neglected state of the colored child and youth is in a long way responsible, as is evidenced by the fact that, out of 228 cases where petit larceny was charged, 192 were against colored children under 16 years of age, and out of 330 charges for the same alleged commissions, 260 of the accused were between 18 and 21 years of age. On the other hand, while the colored young take to theft, the white youth takes to drink. Out of 12 cases of intoxication where the persons were under 16 years of age, 7 were white and 5 colored; 104 out of 185, where the persons were between 18 and 21, were white; while the whites over 21 years were extreme, representing 2,769 cases in a total of 3,440. A strange feature in this matter is found in the fact that, while the white breaker of the peace is disorderly generally when under the influence of liquor, the colored representative creates disturbances without the invigorating influence of drink. With these few suggestions your attention is invited to the comprehensive tables prepared by and included in the report of the chief clerk, which contain in every detail the effective work of the force.

PENSION FUND.

No provision has been made or plan adopted for the augmentation of the police fund established by the act approved February 25, 1885. It will be seen by the following statement of its condition that a serious depletion of the principal has already begun. In other words, since the last annual report the fund has been reduced \$4,004.98. When a member of the force becomes disabled "by injury received or disease contracted in line of duty" he is discharged from service, with an allowance not to exceed \$50 per month, "and in case of his death from such injury or disease, leaving a widow or children under 16 years, for their relief." At this time the credits to this fund from the per capita assessment of \$1 per month, and from the interest on the principal, fines, rewards, etc., are insufficient to meet the expenses. Eventually the fund will become exhausted, and Congress, unless measures shall be taken to make it self-sustaining, will be called upon, by yearly appropriations, to make good the deficit.

According to the books of the auditor of the District of Columbia, on the 30th day of June, 1891, there was a balance of \$701.57 in cash on hand and \$27,000 invested in District of Columbia 3.65 bonds.

The deposits made by this department to the credit of the fund were as follows:

1890.		1891.	
August 5.....	\$45.00	April 9.....	\$86.00
September 8.....	92.50	May 8.....	81.00
October 8.....	110.00	June 5.....	131.00
November 7.....	94.98	July 8, June collection.....	100.50
December 5.....	94.89	Property sale.....	281.58
1891.		Error, McCormick and Glover..	8.00
January 8.....	105.00		
February 9.....	105.00		
March 13.....	90.00		1,425.45

The above deposits were derived from the following sources:

1890.		
June 30. Balance of fines uncollected.....		\$40.00
1891.		
June 30. Fines imposed.....		1,350.00
Time lost.....		9.87
Rewards received.....		153.00
Property sale.....		281.58
		1,834.45
Fines collected.....	\$1,079.00	
Time collected.....	9.87	
Rewards collected.....	55.00	
Property sale.....	281.58	
		1,425.45
Balance fines uncollected.....		156.00
Fines remitted.....		155.00
Rewards to officers.....		98.00
		1,834.45

ROLL OF PENSIONERS.

The pension roll now aggregates \$13,680 per annum, not including allowances for funeral expenses of \$75 in case of death of a member of the force. The roll is as follows:

	Per month.		Per month.
Gorman, Johanna	\$10	Kearney, Harry	\$10
Gorman, William A	10	Crippen, Florence	20
Gorman, John J	10	Reilly, Margaret	20
Gorman, Elizabeth	10	Reilly, Margaret	10
Milstead, R. A	30	Greene, Marion V	20
Kearney, S. L	40	Greene, John S	10
Nokes, G. W	50	Greene, Minnie B	10
Powell, William	30	Buil, J. Mc. L	50
Harper, J. G	30	Harbin, Sarah	20
Atchison, H. L	25	Kenner, Margaret A	20
Shelton, Joseph	50	Tilling, Andrew	25
Coomes, Sarah A	30	Larrabee, E. H	50
Jones, Sophia	20	Fitzgerald, T. D	50
Greer, Lucinda H	25	Chamberlain, A. H	50
Redway, Loretta	25	Cunningham, William	50
Findley, John T	50	Ferguson, Annie H	20
Barkley, G. W	50	Ferguson, Mark E	10
Skidmore, Mary A	20	Collins, S. H	50
Crump, Margaret	20	Nokes, Mary J	20
Harper, Elizabeth A	20	Nokes, R. A	10
Warwick, Clara V	20	Nokes, Ethel A	10
Warwick, L. K	10		
Kearney, Kate	20	Total	1, 140

COÖPERATIVE RELIEF.

There is conducted independently of the police department a coöperative relief association, which is contributed to by most of those who are or have been active members of the department. There are two classes of insured in this organization—those who pay \$2, as well as those who pay \$1, to the beneficiary in case of death of the insured, and those who contribute \$1, who, on the other hand, are insured for the number of dollars the full membership would contribute at \$1 each.

In one case the widow or heirs receive about \$614, and in the other about \$521. The total insurance varies in every instance, owing to increase or decrease in membership.

For years the chief clerk has conducted, without compensation, the official business pertaining to this charitable arrangement, and is entitled to the gratitude of those interested for the excellent system of credit and disbursements he has arranged. The records of this association are open to the inspection of members at all times. During the past year the benefits paid were as follows:

1890.			
November 17.	Heirs of George D. Kenner		\$614
November 17.	Heirs of P. W. Harbin		505
November 21.	Heirs of George Acton		504
1891.			
May	9. Heirs of William Ferguson		516
May	11. Heirs of Charles M. Skippen		513
June	24. Heirs of Charles H. Homer		521
			3, 173

GRAND ARMY AND GOOD ORDER.

Preparations are now being made for the entertainment in this city of the Grand Army of the Republic in the ensuing year. It is assumed that great numbers of veterans of the war of the rebellion will then gather here, and that an increase of the police force will be requisite to afford protection against evil characters who on all such occasions present themselves to prey upon the unwary. If the application for 42 additional men should be granted, however, it is confidently believed that this department will be able to defend from depredations the guests of the national capital, without the necessity of an appropriation for the temporary employment of special privates.

Respectfully submitted,

WM. G. MOORE,
Major and Superintendent Metropolitan Police.

REPORT OF THE CHIEF ALSO PROPERTY CLERK,

METROPOLITAN POLICE DEPARTMENT,
OFFICE OF THE CHIEF CLERK,
Washington, D. C., July 1, 1891.

Maj. WILLIAM G. MOORE,
Superintendent of Police:

SIR: The clerical requirements of the last, exceeded those of the preceding year, and necessitated the detail of another subordinate from his proper station to service in the clerk's office.

Police trial proceedings have, within the same period, developed into lengthy hearings, which demanded the constant attention of the stenographer who had officiated as deputy property clerk in former years, in addition to the taking of trial testimony. The increase of business has brought about a complete change in affairs, and the work at headquarters is now assigned as follows: Taking of testimony and type-writing, to J. A. Kemp; keeping record of communications sent and received, to Station Keeper Frank Miller (detailed from Seventh precinct); recording arrests, to Private C. E. James (detailed from Fourth precinct); attending police court, grand jury, and criminal court with property held as evidence, to Private M. T. Slater (detailed from the Second precinct); general and miscellaneous work, to Private W. M. Mattingly (detailed from the Eighth precinct), and myself. In this connection, it is my desire to express to those who divided last year's labors with me, my appreciation of the intelligent, diligent, and painstaking manner in which they discharged the responsibilities assigned them.

An examination of the lost, stolen, and abandoned property records and of the property on hand, for a period covering my incumbency in office as property clerk, revealed no losses other than those caused by moths and decay, and a clear balance sheet.*

I beg to renew my time-worn request for a property storage vault, where may also be secured the records of the department.

The detailed statistics and tables herewith presented have been carefully gathered and arranged, and the carrying of concealed weapons, it will be observed, has in no way been diminished, as far as police cases are concerned. There should be a law inflicting a heavy penalty for "gentlemen" and "hoodlums" bearing concealed arms in the District, and when taken by the police the implements should be confiscated and burned, as is the practice elsewhere.

Payments for clothing and fines have generally been made promptly, the "tardy seven" causing the usual delays and inconveniences in making settlements.

The lieutenants of the force I thank for their coöperation and aid in carrying out property and other regulations of the manual relating to this office.

Respectfully,

RICHARD SYLVESTER,
Chief, also Property Clerk.

DISCIPLINE.

Total number of trials of members of the force for violation of the rules and regulations, dismissals, resignations, and retirements on pension, for the fiscal year ending June 30, 1891:

Absence from duty without leave.....	8
Absence without leave and intoxication	3
Conduct unbecoming an officer.....	41
Conduct unbecoming an officer and neglect of duty	7

* CERTIFICATE.

We certify that we have examined the property records and property in the hands of the property clerk, and find the same to balance.

JNO. P. McNAMARA,
J. A. KEMP.

82 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Gross neglect of duty	7
Intoxication	10
Intoxication and neglect of duty	2
Insubordination and neglect of duty	1
Nonpayment of debt	8
Neglect of duty	33
Neglect of duty and inefficiency	1
Violation of orders and neglect of duty	3
Violation of paragraph—	
No. 60 of Manual	1
No. 49 of Manual	1
No. 38 of Manual	2
No. 130 of Manual	1
No. 9 of Manual, section 3	1
No. 135 of Manual	6
No. 41 and inefficiency	1
No. 135 and intoxication	1
No. 36 of Manual	3
Violation of paragraphs—	
Nos. 130, 135, and 138 of Manual	1
Nos. 36, 135, and 138 of Manual	9
Nos. 135 and 138 of Manual	28
Nos. 9 and 36 of Manual	1
Violation of paragraph 134 and section 4 of paragraph 9	1
Total	181

Disposition.

Fined	87
Cautioned	5
Charges dismissed	44
Required to pay debt	11
Fined and reprimanded	9
Suspended for one month	1
Reduced to first-class private and fined	1
Removed from the force	23
	181

CHANGES IN THE FORCE.

1890.	
June 30. Full complement	376
Total force	376
1891.	
June 30. Resigned	20
Removed	23
Pensioned	7
Died	3
	53
Increased by act of Congress	323
Vacancies	32
	53
Appointments	408
	85

COMMUNICATIONS.

Recorded communications received from July 1, 1890, to June 30, 1891	5,537
Recorded communications sent from July 1, 1890, to June 30, 1891	1,081

ORDERS.

General orders issued	49
Special orders issued	55
Circulars issued	31

STATEMENT OF ARRESTS.

Total number of cases of arrest..	25,166	Read and write	19,293
White	11,546	Can not read and write	5,873
Colored	13,620		25,166
	25,166	Males—	
		Married	7,299
Male	21,111	Single	13,812
Female	4,055	Females—	
	25,166	Married	1,181
		Single	2,874
			25,166

Callings as given by those arrested.

Agents	234	Dyer	1
Actors	2	Dentists	2
Artists	4	Druggists	21
Army officer	1	Draftsmen	7
Apprentices	45	Drummer	1
Awning-makers	2	Dredger	1
Barbers	208	Dancing-masters	2
Bartenders	40	Decorator	1
Barkeepers	199	Drayman	1
Bakers	122	Engineers	76
Blacksmiths	212	Electricians	9
Bricklayers	358	Editor	1
Bootblacks	90	Expressmen	5
Bookbinders	30	Electrotyper	1
Bookkeepers	7	Engraver	1
Brokers	12	Farmers	206
Butchers	122	Firemen	24
Brewers	8	Fakirs	2
Boiler-makers	11	Florists	8
Bottler	1	Foremen	7
Boatmen	6	Fishermen	17
Broom-makers	4	Gardeners	37
Builders	20	Grocers	75
Brass-finisher	1	Gamblers	4
Brakemen	4	Glaziers	3
Ball-player	1	Grinder	1
Bell-boys	2	Gunsmith	1
Butlers	12	Guides	2
Brick-makers	13	Hucksters	353
Bill posters	4	Housekeepers	924
Bell-hangers	2	Hostlers	35
Banker	1	Hod-carriers	42
Carpenters	497	Hotel-keepers	16
Clerks	1,087	Harness-makers	27
Conductors	24	Hatters	3
Contractors	154	Horse dealers	3
Cooks	87	Hackmen	7
Carriage-makers	2	Inspectors	5
Coppersmiths	4	Ironworkers	2
Cigar-makers	24	Interpreters	2
Caterers	5	Janitors	7
Coachmen	28	Junk dealers	11
Cabinet-makers	17	Jewelers	22
Collectors	11	Jockey	1
Coopers	11	Lawyers	126
Constables	7	Laundresses	14
Cattle-brokers	14	Liverymen	15
Chemists	3	Laborers	8,886
Compositor	1	Lathers	8
Confectioners	2	Lithographer	1
Chandler	1	Laundrymen	54
Drivers	1,547	Locksmiths	3
Doctors	13	Letter carriers	2
Dairymen	22	Lamplighters	6
Dressmakers	7	Liquor dealer	1

Callings as given by those arrested—Continued.

Lineman.....	1	Shoemakers.....	136
Livery-stable keepers.....	5	Schoolboys.....	591
Molders.....	34	Schoolgirls.....	60
Messengers.....	45	Storekeepers.....	79
Merchants.....	385	Servants.....	1,646
Machinists.....	125	Students.....	7
Musicians.....	46	Slaters.....	5
Managers.....	3	Sailmakers.....	4
Marines.....	15	Seamstresses.....	7
Ministers.....	10	Superintendents.....	17
Millers.....	4	Steam-fitters.....	4
Miners.....	5	Saddlers.....	4
Masons.....	11	Salesmen.....	5
Newsboys.....	120	Surgeons.....	3
None.....	993	Stenographer.....	1
Nurses.....	4	Stair-builders.....	4
Oyster shuckers.....	2	Special officers.....	5
Organ grinder.....	1	Steward.....	1
Plate printers.....	8	Surveyors.....	3
Painters.....	367	Stonemasons.....	10
Plumbers.....	160	Sister of Charity.....	1
Printers.....	290	Stereotyper.....	1
Plasterers.....	223	Saloon keepers.....	44
Prostitutes.....	1,029	Stable boss.....	1
Peddlers.....	70	Tailors.....	63
Paper hangers.....	47	Teachers.....	13
Policemen.....	29	Tinners.....	138
Publisher.....	1	Telegraphers.....	9
Policy writers.....	74	Thieves.....	81
Porters.....	53	Typewriter.....	1
Physicians.....	36	Teamsters.....	2
Pavers.....	19	Turners.....	2
Photographers.....	15	Trimmer.....	1
Pawnbroker.....	1	Traders.....	6
Pressmen.....	2	Tinkers.....	4
Produce dealers.....	3	Tailoress.....	1
Professors.....	2	Touts.....	2
Pattern-maker.....	1	Usher.....	1
Private detectives.....	2	Upholsterers.....	28
Potters.....	6	Undertakers.....	8
Platers.....	3	Unknown.....	581
Page.....	1	Veterinarians.....	2
Pilots.....	3	Venders.....	3
Reporters.....	24	Valet.....	1
Restaurant keepers.....	37	Waiters.....	260
Riggers.....	3	Watchmen.....	51
Real-estate agents.....	2	Weavers.....	2
Sheriff.....	1	Wheelwrights.....	6
Soldiers.....	291	Whitewasher.....	1
Stonecutters.....	123		
Sailors.....	86	Total.....	25,166

Nativity of those arrested.

Algiers.....	4	Ireland.....	864
Australia.....	3	Italy.....	126
Austria.....	9	Mexico.....	1
Asia.....	1	Norway.....	2
Arabia.....	1	Persia.....	3
Belgium.....	1	Poland.....	4
Canada.....	19	Prussia.....	2
China.....	56	Russia.....	77
Denmark.....	6	Scotland.....	30
Egypt.....	5	Sweden.....	17
England.....	108	Switzerland.....	13
France.....	36	United States.....	23,329
Germany.....	407	Wales.....	3
Greece.....	34	West Indies.....	1
Holland.....	2		
Hungary.....	2	Total.....	25,166

SUMMARY.

Number of cases	25, 166
Fined and paid	6, 453
Fined and sent to workhouse in default	3, 097
Fined and sent to jail in default	909
Sent to workhouse	1, 517
Sent to jail	546
Sent to grand jury	449
Personal bonds taken	1, 157
Bonds	66
Appealed	101
Nolle prosequed	1, 548
Dismissed	8, 581
Not disposed of	287
Sent to insane asylum	47
Delivered to naval authorities	1
Delivered to military authorities	2
Delivered to United States marshal	26
Delivered to parents or friends	63
Sentence suspended	163
Delivered to Maryland authorities	14
Delivered to Pennsylvania authorities	3
Delivered to Virginia authorities	8
Sent to reform school	78
Returned to workhouse	23
Sent to House of Good Shepherd	3
Sent to House of Mercy	1
Sent to industrial school	1
Sent to orphan asylum	1
Escaped	1

Total..... 25, 166

United States cases:

Fines imposed	\$21, 757. 50
Fines paid	10, 084. 50
Fines appealed	820. 00
To jail—default	10, 525. 00
Execution suspended	66. 00
Personal bonds	262. 00
	21, 757. 50

District of Columbia cases:

Fines imposed	62, 842. 00
Fines paid	31, 200. 00
Fines appealed	5, 500. 00
To workhouse—default	23, 611. 00
Execution suspended	1, 813. 00
Personal bonds	718. 00
	62, 842. 00

VISITS OF GENERAL OFFICERS.

Commissioners, District of Columbia	15
Superintendent	68
Captain	868
Lieutenant and inspector	961
Police surgeons	481

86 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

ESTIMATED VALUE OF MONEY AND PROPERTY THAT CAME INTO THE POSSESSION OF THE SEVERAL PRECINCTS DURING THE YEAR ENDING JUNE 30, 1891.

Amount received.....	\$280,289.92
Returned to—	
Owners.....	107,739.41
Property clerk.....	26,726.59
Poundmaster.....	1,636.00
Taken from prisoners and returned—	
Order lieutenant.....	90,711.46
Order police judge.....	436.46
Collateral returned to—	
Marshal, at police court.....	17,430.40
Collector, at police court.....	35,584.60
Assessor, District of Columbia.....	25.00
	<u>280,289.92</u>

ESTIMATED LOSSES—RECOVERED.

Property stolen.....	\$63,604.00
Reported lost or mislaid.....	4,993.75
Recovered.....	18,489.19

MISCELLANEOUS REPORT.

Accidents.....	1,500	Fire plugs damaged.....	67
Attempts at suicide.....	17	Filthy gutters, alleys.....	157
Animals taken astray.....	481	Fountains damaged.....	33
Animals to property clerk.....	84	Found sick on street.....	128
Animals to poundmaster.....	62	Hydrants damaged.....	415
Abandoned infants found.....	18	Inquests attended.....	25
Dead infants found.....	75	Lamps damaged.....	488
Dead bodies found.....	13	Lamps not lighted.....	2,183
Drowned bodies found.....	29	Lodgers accommodated.....	5,099
Dead animals.....	5,165	Pumps damaged.....	222
Dangerous or broken pavements.....	1,107	Permits examined, building.....	1,522
Dangerous holes, roadway.....	652	Permits examined, miscellaneous.....	4,149
Dangerous buildings.....	22	Sewers damaged.....	174
Dangerous bridges.....	37	Sewers, filthy.....	135
Damaged trees and boxes.....	347	Suicides.....	23
Doors and windows found open.....	158	Telephone messages sent and received.....	38,742
Deaths—coroner notified—no inquest.....	159	Water mains damaged.....	207
Fires—times attended.....	256	Water pipes damaged.....	103

REPORT OF THE POLICE PATROL AND SIGNAL SERVICE.

Drivers.....	10
Wagons.....	9
Horses.....	13
Reports from boxes by officers.....	438,971
Messages sent and received.....	4,081
Calls for wagons by—	
Officers.....	5,319
Citizens.....	197
Messengers or telephone.....	1,044
Persons taken to—	
Headquarters.....	79
Police court.....	440
Jail.....	11
Workhouse.....	8
Hospitals.....	467
Home.....	45
Depots.....	42
Gallery.....	23
Asylums.....	25
Several homes.....	7

Dead bodies removed	90
Children to homes	66
Accidents attended	77
Injured removed to homes	95
Sick removed to homes	165
Times reserves to fire	117
Miscellaneous runs	1,571
Total number of runs made	9,713

LOST, STOLEN, AND ABANDONED PROPERTY.

Estimated value of money and property returned to the property clerk, and the disposition of same, for the fiscal year 1891.

July	\$1,889.69	Brought forward	\$27,591.09
August	2,735.38	Delivered to owners by order of the court or upon proof of ownership	\$22,917.69
September	1,438.00	Delivered to claimants on bond	2,857.50
October	3,341.24	Sold	9.73
November	2,725.27		25,784.92
December	2,408.91		
January	2,643.63		
February	1,429.08		
March	1,469.56		
April	2,091.99		
May	3,032.49		
June	2,385.85	Estimated value of balance ..	\$1,806.17
Total	\$27,591.09		

Table of arrests—Continued.

UNDER TWENTY-ONE YEARS OF AGE.

Offenses.	Males.	Females.	White.	Colored.	Fined and paid.	Workhouse—de- fault.	Tail—default.	Sent to workhouse.	Sent to jail.	Sent to grand jury.	Personal bonds.	Bonds.	Appealed.	Nol-prossed.	Dismissed.	Not disposed of.	To insane asylum.	To naval authori- ties.	To United States marshal.	To parents or friends.	Sentence sus- pended.	To Reform School.	Returned to work- house.	To House of Good Shepherd.	To House of Mercy.	Delivered to Vir- ginia authorities,	Delivered to Mary- land authorities.	Total.
Affray	139	25	62	102	73	...	35	...	3	...	3	...	...	16	33	1	...	...	...	...	...	...	...	...	...	...	...	164
Arson	2	...	...	2	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Assault	190	42	48	184	56	...	51	...	30	...	7	...	...	30	57	...	...	...	...	...	1	...	...	...	...	...	...	232
Assault and battery	248	57	54	251	67	...	69	...	44	...	5	...	...	33	82	5	...	...	...	...	...	...	...	...	...	...	...	305
Assault with intent to kill	31	1	7	25	1	...	2	...	1	11	...	...	...	9	5	2	...	...	...	...	...	...	...	...	...	...	...	32
Assaulting officer.....	5	2	1	6	3	...	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
Attempt at arson.....	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Attempt at rape.....	1	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Cohabiting with female child under 16 years of age.....	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Cruelty to animals.....	38	...	12	26	25	4	...	...	...	...	...	...	...	3	5	1	...	...	...	...	...	...	...	...	...	...	...	38
Cruelty to children	...	2	...	2	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Concealed weapons	79	5	13	71	5	46	...	3	...	...	1	...	...	4	18	6	...	...	1	...	1	...	...	...	...	...	...	84
Contempt of court.....	13	7	2	18	3	...	...	...	1	...	1	...	...	...	14	...	...	...	1	...	...	...	...	...	...	...	...	20
Creating nuisance.....	6	...	3	3	2	1	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	6
Disorderly conduct	1,268	357	268	1,357	694	568	...	3	...	...	70	...	...	34	237	10	...	...	...	...	9	...	...	...	...	...	...	1,625
Destruction private property.....	27	2	9	20	6	11	...	...	...	...	...	...	...	3	8	1	...	...	...	...	...	...	...	...	...	...	...	29
Destruction public property.....	7	...	6	1	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
Enticing prostitution.....	...	6	...	6	1	...	1	4	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	6
Embezzlement.....	13	...	10	3	...	...	...	...	...	2	...	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	13
Fast driving.....	37	...	14	23	20	12	...	...	...	...	...	...	...	1	4	...	...	...	...	...	...	...	...	...	...	...	...	37
Forgery	3	...	1	2	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Fugitives— Justice	29	4	2	31	...	...	...	9	...	...	...	...	...	...	1	...	...	...	4	...	...	...	17	...	...	...	...	33
Parents	17	...	12	5	...	...	...	...	...	...	...	...	...	...	4	...	...	...	10	...	...	...	...	2	1	...	...	17
Reform School.....	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2
Grand larceny	23	7	16	14	...	...	1	...	...	10	6	...	...	8	5	...	...	...	...	...	...	...	...	...	...	...	...	30
Habitual drunkard	5	...	4	1	...	...	...	3	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	5
Highway robbery	6	...	...	6	...	...	...	...	...	4	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	8
Housebreaking— Day	8	...	2	6	...	...	...	...	...	2	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	6
Night.....	29	...	5	24	1	...	1	...	...	17	...	...	...	8	1	...	...	...	...	...	...	1	...	...	...	...	...	29
Intoxication	163	22	104	81	...	...	...	...	...	...	...	...	...	...	185	...	...	...	...	...	...	...	...	...	...	...	...	185
Intoxication and disorderly	130	27	56	101	64	71	...	1	...	...	6	...	...	1	12	1	...	...	...	...	1	...	...	...	...	...	...	157
Interfering with officer	1	1	...	2	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2

Table of arrests—Continued.

OVER TWENTY-ONE YEARS OF AGE.

Offenses.	Males.	Females.	White.	Colored.	Fined and Paid.	Workhouse default.	Jail default.	Sent to workhouse.	Sent to jail.	Sent to grand jury.	Personal bonds.	Bonds.	Appealed.	Nol-prossed.	Dismissed.	Not disposed of.	To insane asylum.	To military au- thorities.	To United States marshal.	To parents or friends.	Sentence sus- pended.	Returned to work- house.	To House of Good Shepherd.	Delivered to Mary- land authorities.	Delivered to Vir- ginia authorities.	Delivered to Penn- sylvania author's.	Total.
Abortion.....	1	3	1	3						2		1			1												4
Aiding fugitive to escape.....		1		1		1																					1
Affray.....	44	59	256	217	269		67				8			43	86												473
Accessory to murder.....	1			1						1																	1
Arson.....	1			1																							1
Assault.....	651	140	315	476	261		132		32	1	29	2	2	109	216	5						2					791
Assault and battery.....	907	172	426	653	338		193		60	6	30	2	5	132	301	11					1						1,079
Assault with intent to kill.....	63	6	26	43	6		2		5	26				13	12	3			2								69
Assaulting officer.....	28	4	16	16	13		11		4		1				3												32
Attempt at larceny.....	2		1	1			1		1																		2
Attempt at rape.....	5		4	1						1		1		2		1											5
Blackmailing.....		1	1											1													1
Bigamy.....	4	1	3	2						3	1					1											5
Buying stolen goods.....	1			1	1															2							1
Conspiracy.....	6	3	7	2						4		2			1												9
Cohabiting with female child under 16 years of age.....	3		2	1						1					1	1											3
Cruelty to animals.....	213	7	136	84	161	3		1	1		12			7	29	3											220
Cruelty to children.....	1	1	1	1	1										1												2
Criminal libel.....	3		3							1		1		1													3
Concealed weapons.....	173	5	61	117	21	86		1			7		1	4	55	1											178
Contempt of court.....	93	23	56	60	22	4	8		2					12	66	1			1								116
Creating nuisance.....	27	2	18	11	5	2					4		1	9	3	1											29
Disorderly conduct.....	2,281	656	1,092	1,845	1,430	855		3			97			78	442	17					15						2,937
Desertion.....	2		2															2									2
Destroying private property.....	86	14	52	48	36	11					6			18	25	1								1			100
Destroying public property.....	17		11	6	6		3							2	4												17
Enticing prostitution.....	3	6	3	6	1	1	2	1			1			1	2												9
Enticing female child to house of prostitution.....	1	1	1	1						2				1													2
Employing unlicensed engineer.....	1		1																								1
Embezzlement.....	33		21	12						12		3		16	2												33
Exhibiting obscene pictures.....	7		7		1					1					5												7
Fast driving.....	129	1	92	38	104	9					4		2	1	6	3					1			1			130
Forgery.....	13	2	9	6						6		1		3	2										2		15
Fornication.....	1		1		1																						1

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Fugitives—	45	1	21	25	11	27	1	3	29	4	1	1	12	4	8	3	2	46
Justice.....	2	15	44	34	1	46	27	1	3	29	14	2	2	1	2	2	1	2
Insane asylum	63	2	54	10	1	1	1	1	1	1	1	1	1	1	1	1	1	78
Grand larceny	62	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	64
Habitual drunkard.....	.....	3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Harboring female child—immoral purposes.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Highway robbery .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Housebreaking—	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Day	22	2	8	16	.....	.....	9	.....	.....	13	1	1	.....	.....	.....	.....	.....	24
Night	47	4	17	34	.....	.....	24	.....	2	18	7	.....	.....	.....	.....	.....	.....	51
Intoxication.....	3,213	227	2,769	671	.....	.....	.....	.....	.....	3,439	.....	.....	.....	.....	.....	.....	.....	3,440
Intoxication and disorderly	884	135	575	444	485	3	22	.....	.....	12	44	5	11	.....	.....	.....	.....	1,019
Interfering with officer.....	11	5	10	6	2	1	1	.....	.....	2	4	.....	.....	.....	.....	.....	.....	16
Indecent exposure	199	6	132	73	107	1	6	.....	.....	3	11	1	3	.....	.....	.....	.....	205
Indecent assault.....	10	.....	8	2	1	3	2	.....	.....	3	.....	1	.....	.....	.....	.....	.....	10
Insanity.....	52	20	40	32	.....	1	.....	.....	.....	.....	26	41	4	.....	.....	.....	.....	72
Keeping disorderly house	30	41	22	49	11	15	4	.....	.....	7	18	4	1	.....	.....	.....	.....	71
Keeping bawdy house.....	.....	21	9	12	12	1	1	.....	.....	3	1	.....	.....	.....	.....	.....	.....	21
Keeping gambling house or table.....	69	1	41	29	13	4	17	2	2	10	13	7	.....	.....	.....	.....	.....	70
Keeping unlicensed bar.....	143	84	190	37	82	4	1	2	32	13	64	27	1	.....	.....	.....	.....	227
Keeping open bar Sundays.....	11	1	10	2	5	.....	.....	.....	.....	.....	6	1	.....	.....	.....	.....	.....	11
Keeping dangerous dogs.....	5	3	5	3	1	.....	.....	.....	.....	4	3	.....	.....	.....	.....	.....	.....	8
Kidnapping	1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Loud and boisterous.....	15	3	6	12	13	.....	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....	18
Larceny from person.....	44	2	18	28	.....	.....	31	.....	2	3	10	.....	.....	.....	.....	.....	.....	46
Larceny from United States.....	6	.....	3	3	.....	.....	4	.....	.....	1	1	.....	.....	.....	.....	.....	.....	6
Malicious mischief	2	.....	.....	2	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	2
Murder.....	3	1	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Obtaining money or goods by false pretense.....	62	4	42	24	.....	.....	4	.....	10	21	11	2	2	.....	.....	.....	.....	66
Perjury	7	.....	1	6	.....	.....	1	.....	.....	4	1	1	.....	.....	.....	.....	.....	7
Petit larceny	421	116	162	375	115	.....	115	2	2	88	164	6	3	.....	.....	.....	.....	537
Profanity	768	232	442	558	266	2	.....	11	.....	46	131	3	4	.....	.....	.....	.....	1,000
Rape	10	.....	3	7	.....	.....	5	.....	.....	1	2	2	.....	.....	.....	.....	.....	10
Rioting.....	3	.....	1	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Resisting officer.....	3	.....	1	2	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	3
Receiving stolen goods.....	17	2	3	11	.....	.....	1	.....	1	5	10	.....	.....	.....	.....	.....	.....	19
Refusing to pay back hire.....	61	7	61	7	.....	.....	1	.....	.....	67	.....	.....	.....	.....	.....	.....	.....	68
Refusing to assist officer	5	.....	.....	5	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....	5
Selling liquor to—	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minors.....	9	1	10	3	.....	.....	.....	.....	.....	2	4	1	.....	.....	.....	.....	.....	10
Inmates of Soldiers' Home	8	.....	8	4	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	8
Suspicion	445	52	191	306	1	1	1	17	.....	14	399	.....	.....	.....	.....	.....	.....	497
Selling lottery tickets	11	.....	11	.....	.....	.....	5	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	11
Threats	315	88	168	235	16	.....	34	.....	19	91	100	3	1	.....	.....	.....	.....	403
Trespass	89	2	59	32	31	1	1	.....	.....	5	15	4	.....	.....	.....	.....	.....	91
Unlicensed pawnbrokers.....	2	.....	.....	2	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	2
Vagrancy	975	384	748	611	57	.....	885	.....	15	20	163	2	.....	.....	.....	.....	.....	1,359
Violation of—	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Building regulations	41	.....	33	8	.....	.....	.....	.....	.....	5	4	4	.....	.....	.....	.....	.....	41
Civil rights law	3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Dog law	16	10	17	29	2	.....	.....	.....	.....	16	22	.....	.....	.....	.....	.....	.....	46
Game law	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1

Table of arrests—Continued.

OVER TWENTY-ONE YEARS OF AGE.

Offenses.	Males.	Females.	White.	Colored.	Fined and paid.	Workhouse default.	Sent to workhouse.	Sent to jail.	Sent to grand jury.	Personal bonds.	Bonds.	Appealed.	Not-prosessed.	Dismissed.	Not disposed of.	To insane asylum.	To military authorities.	To United States marshal.	To parents or friends.	Sentence suspended.	Returned to workhouse.	To House of Good Shepherd.	Delivered to Maryland authorities.	Delivered to Virginia authorities.	Delivered to Pennsylvania authorities.	Total.
Violation of—																										
Humane law	2	2	3	1	1				3				1	2												4
Health ordinances	4	1	4	1	1								2													5
Internal-revenue law	4	1	1	4					5																	5
Militia law	1		1																							1
Pawnbrokers' law	15		15										11	2	2											15
Police regulations	346	4	225	125	221	12				25		1	21	42	15						13					350
Policy law	182	13	72	123	1	1		12	121				22	12	26											195
Postal law	1		1											1												1
United States witness law	325	86	186	225				1			2		1	407												411
Water law	26	3	26	3	23					1				1	1						3					29
Other District of Columbia ordinances	1,086	92	776	402	396	122	2		1	63		44	137	325	44						43					1,178
Total	15,337	2,783	9,889	8,291	4,692	1,974	583	1,021	276	351	744	75	100	1,096	6,838	216	45	2	19	4	118	4	1	11	7	318,120

SUMMARY—TABLE OF ARRESTS.

Offenses.	Total.	Nol prossed.	Dismissed.	Cases held.
Abortion	4		1	3
Aiding fugitive to escape	1			1
Affray	664	59	127	478
Accessory to murder	1			1
Arson	6	2	3	1
Assault	1,125	161	304	660
Assault and battery	1,503	186	420	807
Assault with intent to kill	102	22	18	62
Assaulting officer	40		3	37
Attempt at larceny	2			2
Attempt at arson	1			1
Attempt at rape	6	2		4
Blackmailing	1	1		
Bigamy	5			5
Buying stolen goods	1			1
Conspiracy	9		1	8
Cohabiting with female child under 16 years of age	4		2	2
Cruelty to animals	272	10	80	226
Cruelty to children	4	1	1	2
Criminal libel	3	1		2
Concealed weapons	280	10	76	194
Contempt of court	140	12	82	46
Creating nuisance	36	10	6	20
Disorderly conduct	5,135	131	824	4,180
Desertion	2			2
Destroying private property	166	32	45	89
Destroying public property	29	2	5	22
Enticing prostitution	18	4	2	12
Enticing female child to house of prostitution	2	1		1
Employing unlicensed engineer	1		1	
Embezzlement	46	27	2	17
Exhibiting obscene pictures	7		5	2
Fast driving	174	2	10	162
Forgery	18	5	2	11
Fornication	1			1
Fugitives—				
Justice	89		6	83
Parents	74		10	64
Reform School	4			4
Industrial School	1			1
Insane Asylum	2			2
Orphan Asylum	1			1
Grand larceny	117	89	23	55
Habitual drunkard	69	1	8	60
Harboring female child—immoral purposes	1		1	
Highway robbery	13	4	4	5
Housebreaking—				
Day	46	28	1	17
Night	100	37	11	52
Intoxication	3,637		3,636	1
Intoxication and disorderly	1,187	13	56	1,118
Interfering with officer	18	3	4	11
Incorrigibility	30	4	8	18
Indecent exposure	255	3	20	232
Indecent assault	13	3	2	8
Insanity	75		26	49
Keeping—				
Disorderly house	75	8	18	49
Bawdy house	22	3	1	18
Gambling house or table	72	10	13	49
Unlicensed bar	227	13	64	150
Open bar Sunday	12		6	6
Dangerous dog	9	4	4	1
Kidnapping	1	1		
Loud and boisterous	32	2	6	24
Larceny from person	65	6	14	45
Larceny from United States	7	1	1	5
Malicious mischief	5	3	1	1
Murder	7			7
Obtaining money or goods by false pretense	77	23	15	39
Perjury	9	5	1	3
Passing counterfeits	1	1		
Petit larceny	1,095	149	280	666
Profanity	1,236	62	165	1,009
Rape	13	1	2	10
Rioting	3			3
Resisting officer	3	2	1	
Receiving stolen goods	22	6	11	5
Refusing to pay hack hire	71		69	2
Refusing to assist officer	5		2	3
Selling liquor to minors	10	2	4	4

SUMMARY—TABLE OF ARRESTS—Continued.

Offenses.	Total.	Not prossed.	Dismissed.	Cases held.
Selling liquor to inmates of Soldiers Home.....	8	.....	4	4
Suspicion.....	973	38	751	184
Selling lottery tickets.....	11	.....	.....	11
Threats.....	457	103	110	244
Trespass.....	169	5	40	124
Unlicensed pawnbrokers.....	2	.....	1	1
Vagrancy.....	2,030	41	237	1,752
Violation of—				
Building regulations.....	41	5	4	32
Civil rights law.....	3	.....	2	1
Dog law.....	46	16	22	8
Game law.....	4	.....	.....	4
Humane law.....	6	1	1	4
Health ordinances.....	5	2	2	1
Internal-revenue law.....	5	.....	.....	5
Militia law.....	1	1	.....	.....
Pawnbroker's law.....	15	11	2	2
Police regulations.....	449	22	52	375
Policy law.....	230	27	16	187
Postal law.....	1	.....	1	.....
United States witness law.....	485	2	479	4
Water law.....	29	.....	1	28
Other District of Columbia ordinances.....	1,576	156	386	1,034
Total.....	25,166	1,548	8,581	15,037

COMMITMENTS TO PENITENTIARY FROM JULY 1, 1890, TO JUNE 30, 1891.

1. William E. Ward, black, false pretenses, 4 years, July 2, 1890.
2. Joseph Davis, black, larceny from the person, 18 months, July 3, 1890.
3. Jacob Zell, white, grand larceny, 30 months, October 4, 1890.
4. William Teemore, white, housebreaking, 15 months, October 4, 1890.
5. Henry Clifton, white, housebreaking in the day time, 15 months, October 4, 1890.
6. William Harrison, alias William Johnson, black, robbery, 5 years, October 6, 1890.
7. William Taylor, alias William Johnson, black, horse stealing, 5 years, October 7, 1890.
8. Patrick Harris, black, horse stealing, 4 years, October 9, 1890.
9. William Teemore, white, grand larceny, 15 months, October 4, 1890.
10. Henry Clifton, white, grand larceny, 15 months, October 4, 1890.
11. Charles H. Gray, black, larceny, 18 months, October 14, 1890.
12. Frank Williams, black, robbery, 4 years, October 15, 1890.
13. Alexander Campbell, black, assault with intent to kill, 2 years, October 15, 1890.
14. William Briggs, black, manslaughter, 7 years, October 23, 1890.
15. Harvey Gray, black, assault with intent to kill, 2 years, October 24, 1890.
16. Theodore Birch, white, forgery, 1 year and 1 day, October 25, 1890.
17. Bud Warner, black, housebreaking, 9 years, October 25, 1890.
18. Thomas Peyton, black, larceny, 1 year and 1 day, October 29, 1890.
19. Benjamin Duff, alias George Smith, black, assault with intent to kill, 2 years, October 29, 1890.
20. Joseph F. Carter, black, grand larceny, 2 years, October 20, 1890.
21. George Coleman, white, housebreaking, 1 year and 1 day, October 30, 1890.
22. James Ford, black, larceny from the person, 3 years, November 1, 1890.
23. George Diver, alias Tobert, alias Talbert, white, assault with intent to kill, 4 years, November 1, 1890.
24. Conrad King, white, grand larceny, 2 years, November 1, 1890.
25. Conrad King, white, horse stealing, 3 years, November 1, 1890.
26. Joseph Purcell, white, larceny, 16 months, November 5, 1890.
27. Randall Johnson, black, assault with intent to kill, 3 years, November 7, 1890.
28. Samuel Ryder, black, carnal knowledge of a child under 16 years of age, 1 year and 1 day, November 8, 1890.
29. Edward Parker, black, assault with intent to kill, 4 years, November 8, 1890.
30. James Wright, black, larceny, 2 years, November 11, 1890.
31. John Walker, black, assault with intent to kill, 4 years, November 14, 1890.
32. Arthur Dyson, black, assault with intent to kill, 2 years, November 15, 1890.
33. Edward Davis, black, housebreaking, 1 year and 1 day, November 22, 1890.
34. William Wood, alias Willie Ross, black, assault with intent to kill, 2 years, November 22, 1890.

35. John Gordon, black, larceny, 2 years, December 6, 1890.
36. Thomas Lewis, black, housebreaking, 2 years, December 6, 1890.
37. William Dimes, alias William Slocum, black, larceny from the person, 1 year and 1 day, December 6, 1890.
38. Leone V. Curtis alias, Nathaniel Sykes, white, larceny, 1 year and 1 day, December 6, 1890.
39. Henry Lee, black, larceny from the person, 2 years, December 8, 1890.
40. James Harrison, black, assault with intent to kill, 3 years, December 8, 1890.
41. Henry Bruce, black, carnal knowledge of a child under 16 years, 5 years, December 8, 1890.
42. Robert Lane, black, false pretenses, 18 months, December 27, 1890.
43. Lucy Edelin, black, assault with intent to kill, 2 years, December 30, 1890.
44. Mark Smith, black, assault with intent to commit rape, 15 months, January 3, 1891.
45. Lizzie Williams, alias Eliza Frey, black, larceny from the person, 2 years, January 3, 1891.
46. William H. Howard, black, housebreaking and larceny, 15 months, January 3, 1891.
47. William Wilson, black, housebreaking and larceny, 15 months, January 3, 1891.
48. Joseph Lambert, white, housebreaking, 4 years and 6 months, January 12, 1891.
49. Charles Branson, alias James Ross, black, housebreaking, 4 years and 6 months, January 12, 1891.
50. William Johnson, black, violating section 5438 Revised Statutes United States, 1 year and 1 day, January 13, 1891.
51. Frank Monroe, white, larceny, 2 years, January 13, 1891.
52. William Lucas, black, robbery, 3 years and 6 months, January 23, 1891.
53. Peyton Holmes, black, larceny from the person, 3 years and 6 months, January 24, 1891.
54. Philip Ferris, alias Peter Ferris, white, grand larceny, 18 months, February 3, 1891.
55. Isaac Smith, black, embezzlement, 2 years and 3 months, February 4, 1891.
56. Thomas Mullen, white, larceny from the person, two years, February 7, 1891.
57. George Mansfield, alias James Mansfield, black, grand larceny, 2 years and 3 months, February 13, 1891.
58. William Moore, alias Brookie Moore, white, larceny from the person, 5 years February 14, 1891.
59. James Jones, black, grand larceny, 2 years, February 14, 1891.
60. John A. Bricker, white, larceny from the person, 2 years and 3 months, February 14, 1891.
61. William J. Slaughter, alias Thomas Reed, black, false pretenses, 3 years, February 18, 1891.
62. Mollie Robinson, alias Mary, alias Minnie Robinson, black, housebreaking, 4 years and 6 months, February 18, 1891.
63. Joseph Thomas, white, false pretenses, 5 years, February 20, 1891.
64. Joseph Brown, white, false pretenses, 5 years, February 20, 1891.
65. George Seymour, white, larceny, one year and one day, February 21, 1891.
66. John H. Simms, black, larceny, one year and 3 months, March 7, 1891.
67. William M. C. Gordon, black, uttering forged paper, 2 years and 9 months, March 7, 1891.
68. Charles Simms, black, larceny from the person, 4 years, March 10, 1891.
69. Charles Simms, black, robbery, 7 years, March 10, 1891.
70. Thomas O'Neill, white, assault with intent to kill, 2 years, April 4, 1891.
71. George Richardson, black, assault with intent to kill, 4 years, April 4, 1891.
72. William Morris, alias William Scott, black, larceny, 2 years and 9 months, April 4, 1891.
73. William Townsend, black, grand larceny, 2 years, April 9, 1891.
74. Albert Duvall, white, grand larceny, 1 year and 1 day, April 9, 1891.
75. George W. Martin, white, larceny of United States property, 1 year and 1 day, April 9, 1891.
76. Charles T. Yates, black, housebreaking, 4 years, April 13, 1891.
77. Charles Turner, black, false pretenses, 18 months, April 13, 1891.
78. Queen Victoria Williams, black, housebreaking, 2 years, April 14, 1891.
79. Robert Quiet, black, housebreaking, 5 years, April 14, 1891.
80. William Brown, black, larceny from the person, 2 years, April 17, 1891.
81. Albert Brockenbury, black, assault with intent to kill, 2 years, April 20, 1891.
82. William H. Dade, black, house breaking, 4 years, April 21, 1891.
83. John Castor, black, housebreaking, 4 years, April 22, 1891.
84. John Waters, black, false pretenses, 2 years, April 24, 1891.
85. William Morris, alias William Scott, black, grand larceny, 2 years, April 27, 1891.
86. John Akers, black, larceny from the person, 2 years, April 29, 1891.

87. James Johnson, alias John Johnson, black, housebreaking, 4 years, April 29, 1891.
88. William Morris, alias Wm. Scott, black, larceny, 4 years, April 27, 1891.
89. Robert Hammond, black, false pretenses, 3 years, May 4, 1891.
90. Edward E. Brent, black, housebreaking, 4 years, May 4, 1891.
91. Clarence E. Benson, white, housebreaking, 2 years, May 7, 1891.
92. John Simmons, white, larceny from the person, 1 year and 1 day, May 22, 1891.
93. William Gillian, black, housebreaking, 4 years, June 2, 1891.
94. John Monroe, black, assault with intent to kill, 2 years, June 4, 1891.
95. Raymond Robinson, alias Luke Williams, black, housebreaking, 4 years, June 5, 1891.
96. George G. Sledge, alias Sleick, white, false pretenses, 2 years, June 6, 1891.
97. John Thomas, alias Black Tom, black, housebreaking, 3 years, June 6, 1891.
98. James Byrnes, white, manslaughter, 10 years, and fined \$100, June 6, 1891.
99. George G. Sledge, alias Sleick, white, false pretenses, 18 months, June 6, 1891.
100. Henry Dodson, black, assault with intent to kill, 5 years, June 8, 1891.
101. John Wise, alias Charles Thomas, black, false pretenses, 2 years, June 8, 1891.
102. Lincoln Beach, black, assault with intent to kill, 3 years, June 16, 1891.
103. Oliver Turner, black, housebreaking, 3 years, June 16, 1891.
104. John O. Cantwell, black, larceny from the person, 2 years, June 18, 1891.
105. James Pinkney, alias William Brooks, black, false pretenses, 18 months, June 2, 1891.
106. William H. Fletcher, alias William Fletcher, black, bigamy, 2 years, June 27, 1891.
107. Priscilla Ware, black, conspiracy, 2 years, June 27, 1891.
108. Mary Elen, alias Ellen, black, conspiracy, 2 years, June 27, 1891.
109. Charles Grimes, black, conspiracy, 2 years, June 27, 1891.
110. Moses Tibbs, black, conspiracy, 2 years, June 27, 1891.
111. William Grimes, black, conspiracy, 2 years, June 27, 1891.

SANITARY OFFICER'S REPORT.

HEADQUARTERS METROPOLITAN POLICE,
Sanitary Office, July 1, 1891.

Maj. WILLIAM G. MOORE,
Superintendent Metropolitan Police:

SIR: I herewith respectfully submit my annual report showing the work of the sanitary office for the fiscal year ended June 30, 1891. While the exhibits do not show the number of applications made to this office for various kinds of aid, they plainly set forth the steady increase of business as compared with former years, a natural result of the growth in population. The subjoined tables, it will be understood, show in detail the legitimate operations for the past year, but it is well known that many calls are made upon the sanitary officer for assistance and information that can not be specifically classified, and which, owing to their illegitimate nature, are not recorded. Perhaps more than the usual number of tramps, imposters, and "cranks" have made their presence known, whose cases would not even bear a partial investigation. This class of persons do not hesitate to seize upon the most trivial pretexts to urge their flimsy claims, and occasionally it has occurred that the safety of our community has required the immediate return to their homes of the more dangerous imposters and suspicious "cranks." In the lawful administration of the office I have always considered the paramount object of this "charity" or beneficial bureau of our police system to be the amelioration of the condition of the worthy poor and destitute sick of the District of Columbia, and to this end I have studiously investigated each application, and with your approval have disposed of such in accordance with my judgment of the merits in each case.

TRANSPORTATION.

This branch of the work I consider of the least importance, though it is the most inviting to the disappointed and impecunious, requiring thorough investigation and the utmost precaution. During the past year the number of persons furnished with transportation to their homes, or as near thereto as possible, was 622, as against 651 the preceding year, at an expenditure of \$1,846.39, or \$31.05 more than for the previous year. In addition to this there was paid the sum of \$32.82 for the transportation of police escort for 5 persons, while for the year prior the amount paid for the same was \$59.81, making a total outlay for transportation during the past fiscal year

of \$1,879.21, or \$4.06 in excess of former year. The small difference of \$4.06 for the transportation of 29 persons less than during the previous year is accounted for by the greater cost of fares in individual cases, where persons had come from more remote points than has generally been the rule.

The number of those transported embraces 154 ex-soldiers and sailors, an increase of 14 over the number reported the year previous. Several of these disappointed and penniless soldiers were lured here one way or another, by the hope of securing immediate action on their claims for pensions, while others, with perhaps only imaginary claims against the General Government, were imprudently attracted to the capital by the delusive prospects of securing large gains. And thus it is that many are unwittingly thrown upon the charity of the District Government. It is indeed a matter of serious regret that a large number of soldiers applying for pensions fail to understand that Congress has considerably provided for the collection of these gratuities without the presence of the claimants in this city, where they soon grow weary with protracted delays and continued disappointments, until finally they become despondent, destitute, and helpless, absolute objects of public charity, and perhaps hundreds of miles from home and friends. In some cases it has been necessary for us to provide the more feeble of these old soldiers with temporary homes or hospital treatment, in addition to transportation to their distant abodes. For their own safety and comfort we desire to impress upon the soldiers the utter uselessness of their visits to Washington for the purpose of securing that which can quite as certainly and promptly be obtained at their homes.

"Cranks" or suspicious persons to the number of 23 were sent to their homes within the year, while 18 persons of the same class were disposed of in like manner during the former year. I respectfully ask the appropriation of \$2,000 for the item of transportation for the fiscal year 1891-'92, and I beg leave to renew my recommendation that the above sum be specifically appropriated for that purpose and made separate from the appropriation "for the transportation of prisoners."

THE HOSPITALS.

Within the year just closed 2,572 persons were sent to the various hospitals for treatment, while for the previous year the number was 287 less. The cause of this undue increase is chiefly attributed to the recent prevalence of the "grip," when the hospitals were occupied to their fullest extent. Of the number thus provided with hospital accommodations 124 were from the State of Virginia and 109 from the State of Maryland, a very small decrease as compared with the former year, which again demonstrates the fact that the District is unjustly called upon to care for a liberal proportion of the sick and destitute of the two adjoining States.

This outside pressure I am able to account for in the belief that our unfortunate neighbors prefer the better regulated and more comfortable institutions of this city to the accommodations afforded by their own States; but whatever the cause, the taxpayers of the District are compelled to bear one-half the cost of all cases admitted to the hospitals in this city.

I renew my former suggestion that it would be a wise safeguard for those in charge of the several hospitals to receive and treat all patients suffering with contagious diseases, excepting of course smallpox cases, which are otherwise provided for. To set apart a ward so completely isolated from all others as to preclude the possibility of contagion appears to me to be absolutely necessary and wholly practicable. So far as I know at this time this repeated suggestion has been partially carried out by the physician in charge of Freedmen's Hospital.

THE INSANE.

The number of insane admitted to the Government Hospital for the Insane was 171, an increase of 5 over the prior year. These persons were properly tried by due process of law, which course of proceeding requires from 3 to 5 days. I have in two former reports stated the urgent necessity of providing some suitable place of detention for alleged insane subjects while in the custody of the police department awaiting final commitment. At present we find the only place available to be the station-house cells, which are unsuited, and for reasons before stated altogether improper. Considerations of humanity demand that some fit and wholesome place be established for these unfortunate persons. In the absence of such a convenient lodge I have been frequently compelled to arrange with Dr. Godding of the Government Hospital for the Insane, for the admission of violent subjects in advance of formal disposition and pending proceedings *de lunatico inquirendo*. This course on the part of Dr. Godding is wholly optional, and should be appreciated by the public.

AMBULANCE SERVICE.

The work of this branch of the police service continues to increase. The number of calls responded to during the year was 1,731, being 191 more runs made than during the year previous. This increase was mainly caused by the unprecedented demand for the ambulances during the epidemic of the "grip" the past winter, when this service was taxed to its utmost capacity. It was then, more than ever, that the services of the additional driver largely aided in the expedition of the work. I can not speak too highly of the faithfulness, promptness, and general efficiency of our ambulance drivers, who are certainly the most poorly paid employes of the department. I have repeatedly asked that the compensation of these worthy men be increased to a degree commensurate with their peculiar duties and their personal necessities. The principal driver should receive at least \$50 per month, and the two assistants each not less than \$40 per month. Your earnest approval of this proposition in former reports has been sensibly appreciated by these men.

I must not overlook another very important improvement, and one which can not be too earnestly presented. I refer to the removal of the ambulance stables from the Fourth precinct to the Second, which is more centrally located and more accessible from headquarters. Promptness is the primary requirement in this part of our work, and calls are naturally more frequent in the central or more thickly populated section of the city. Under the present arrangement delays are frequently caused at the railroad crossings on Virginia and Maryland avenues. The obvious reasons for this change are at once apparent, and all interested most heartily concur in this recommendation.

ASYLUM FOR INEBRIATES.

This subject is one ever present when we view the wide field of moral improvement. The evils existing in any community more than keep pace with its growth in population, and so it can be said of our own fair city. I believe that if Congress, by the creation in this District of some institution of this nature, looking to the treatment and care of those who have become wrecked, both mentally and physically, by the excessive use of alcohol, they will have accomplished a work equal in all respects to the most humane and beneficent. Such an asylum, or home, properly conducted and equipped, would exert a kindly and restraining influence potent for good, and which would, I am sure, afford the most salutary results. It is my belief that the treatment of these victims of drink should be made compulsory and their care considered quite as important as the treatment of any disease.

I conclude by expressing my grateful acknowledgments to you for your able counsel and generous approval of my work. I am also sensible of my obligations to the officers at headquarters and the several lieutenants of the force for valuable information and assistance on numerous occasions; I further feel it my duty to offer my thanks to Dr. Godding, Superintendent of the Government Hospital for the Insane, for his generous coöperation in cases of insanity. Thanks are also due to the attorney for the District, to the intendant of the Washington Asylum, and those in charge of the various hospitals, as well as to the physicians to the poor and the managers of the several homes and charitable institutions of the city.

Respectfully submitted.

J. A. FRANK,
Sanitary Officer, Metropolitan Police.

REPORT OF THE SANITARY SERVICE.

Drivers.....	4
Ambulances.....	3
Horses.....	3

DISPOSITION OF SICK AND DESTITUTE PERSONS.

Sent to—	
Freedman's Hospital.....	806
Washington Asylum Hospital.....	320
Providence Hospital.....	670
Garfield Hospital.....	58
Columbia Hospital.....	28
Homeopathic Hospital.....	39
Children's Hospital.....	38

Sent to—

Government Hospital for Insane.....	171
Almshouse.....	174
St. Ann's Infant Asylum.....	6
Washington City Orphan Asylum.....	5
House of Good Shepherd.....	2
Women's Christian Association.....	2
Little Sisters of the Poor.....	2
House of Mercy.....	2
Hope and Help Mission.....	6
Colored Orphan's Home.....	11
Emergency Hospital.....	10
Foundling Asylum.....	8
St. Joseph's Asylum.....	3
Minor Institute.....	3
Jail.....	1
Reform School.....	1
German Orphan Asylum.....	2
Newsboys Home.....	2
Workhouse.....	3
Removed—	
To depots from hospitals or homes.....	39
To their homes.....	139
Insane to station houses.....	7
Intoxicated to station houses.....	1
Destitute persons from streets to station houses.....	9
To United States marshal's office.....	3
Dead bodies to morgue.....	2
Miscellaneous runs where service was rendered.....	1,587
Miscellaneous runs where service was not rendered.....	144

Ages of sick and destitute.

	Under 10 years.	Between 10 and 21 years.	Between 21 and 35 years.	Between 35 and 40 years.	Between 40 and 50 years.	Between 50 and 60 years.	Between 60 and 70 years.	Between 70 and 80 years.	Over 80 years.	Total.
White:										
Males.....	17	84	238	93	176	191	142	53	16	1,010
Females.....	13	48	135	46	48	00	46	30	4	430
Colored:										
Males.....	36	94	180	56	90	64	64	36	17	637
Females.....	15	139	156	36	53	33	30	20	13	495
Total.....	81	365	709	231	367	348	282	139	50	2,572

NATIVITY.

Arabia.....	3	Russia.....	6
Canada.....	12	Sweden.....	3
Denmark.....	1	Scotland.....	15
England.....	33	Switzerland.....	7
France.....	17	Turkey.....	1
Germany.....	96	United States, white.....	1,034
Ireland.....	195	United States, colored.....	1,132
Italy.....	10	Wales.....	2
India.....	2		
Poland.....	3	Total.....	2,572

102 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

OCCUPATIONS OF THE SICK AND DESTITUTE.

Agents	18	Millers	3
Apprentices	5	Musicians	2
Actors	1	Molders	4
Artists	1	Miners	2
Bakers	11	Messenger	1
Barbers	7	None	481
Blacksmiths	13	Nurses	13
Bricklayers	19	Newsboy	1
Butchers	4	Painters	35
Bootblacks	2	Pavers	5
Brakemen	9	Plasterers	7
Boiler-makers	5	Policemen	2
Bartenders	3	Plumbers	6
Bookbinders	1	Physicians	7
Carpenters	35	Printers	12
Cabinet-makers	7	Peddlers	9
Clerks	139	Potter	1
Cooks	4	Prostitute	1
Cigar-makers	2	Paper-hanger	1
Contractor	1	Soldiers	19
Coachman	1	Shoemakers	17
Coach-maker	1	Sailors	35
Drivers	45	Seamstresses	29
Dairymen	1	Schoolboys	19
Druggists	4	Servants	510
Engineers	12	Stonecutters	9
Farmers	21	Stonemasons	2
Firemen	7	Schoolgirls	3
Florist	1	Tailors	12
Gardeners	7	Tinners	11
Hatters	2	Teachers	11
Hostlers	13	Unknown	8
Housekeepers	111	Upholsterer	1
Harness-makers	4	Waiters	24
Hucksters	4	Watchmen	20
Jewelers	4	Weavers	3
Laborers	688	Wheel-wrights	3
Lawyers	8		
Machinists	18	Total	2,572
Merchants	4		

RESIDENCE OF SICK AND DESTITUTE.

Alabama	5	Missouri	1
Connecticut	9	Minnesota	1
California	1	New York	39
District of Columbia	2,089	New Jersey	7
Delaware	2	North Carolina	13
Florida	5	New Hampshire	1
Georgia	5	Ohio	18
Illinois	4	Pennsylvania	43
Indiana	4	Rhode Island	2
Iowa	1	Tennessee	3
Kansas	1	Texas	2
Louisiana	1	Virginia	124
Maine	4	Nonresidents	35
Massachusetts	7	Unknown	27
Maryland	109		
Mississippi	6	Total	2,572
Michigan	3		

INDIGENTS—WHERE SENT AND WHY.

Residents sent to friends.....	33	Assisted on their way home.....	130
Residents sent to places of employment.....	25	Sent home by order District Columbia Commissioners.....	2
Ex-soldiers to Hampton Home	29	Sent home, discharged by Government	7
Ex-soldiers to friends, etc	15	Sent home to friends, suspicious characters	16
Looking for pensions to friends....	154	Sent home, looking for friends	39
Looking for Government work to friends.....	36		
"Crank" to friends.....	23	Total.....	622
Convalescents to friends.....	46		
Seeking private work to friends ..	67		

TRANSPORTATION FURNISHED TO—

Altoona, Pa	1	Jessup's, Md	1
Asbury Park, N. J.....	1	Jersey City, N. J.....	2
Afton, Va.....	1	Keysville, Va.....	1
Alexandria, Va.....	2	Lynchburg, Va	9
Baltimore, Md.....	110	Leesburg, Va.....	3
Burlington, Vt	1	Lancaster, Pa	1
Boston, Mass.....	2	Martinsburg, W. Va.....	2
Bentley Springs, Md.....	1	Manassas, Va.....	2
Bellaire, Ohio.....	1	Mansfield, Ohio.....	2
Boyd Station, Md.....	1	Marlboro, Md	1
Bluewing, Va	1	Millerstown, Pa.....	1
Bowie, Md	1	Montreal, Va	1
Chicago, Ill	10	Milford, Va.....	1
Cincinnati, Ohio	20	Mallory, Va.....	1
Columbus, Ohio	14	New York, N. Y.....	79
Cumberland, Md	16	Norfolk, Va	28
Cox's Station, Md	2	Newark, N. J	1
Chattanooga, Tenn	1	Odenton, Md.....	1
Canandaigua, N. Y	3	Ocala, Fla	1
Culpeper, Va.....	6	Philadelphia, Pa	75
Charlottesville, Va	1	Pittsburg, Pa	49
Chester, Pa	1	Parkersburg, W. Va	3
Cleveland, Ohio	2	Richmond, Va.....	21
Charleston, S. C	1	Rockville, Md.....	2
Danville, Va	4	Reading, Pa	1
Delaplane, Va.....	1	Raleigh, N. C.....	1
Dubuque, Iowa	1	Ruther Glen, Va.....	1
Elmira, N. Y	4	Relay House, Md.....	1
Erie, Pa.....	1	St. Louis, Mo.....	2
Emporium, Pa	1	Springfield, W. Va.....	1
Fort Monroe, Va.....	40	Sterling, Va.....	1
Fredericksburg, Va.....	16	Selbyville, Del	1
Frederick, Md.....	2	Trenton, N. J.....	5
Fort Wayne, Ind	1	Thomasville, N. C	1
Fayetteville, N. C	1	Thoroughfare, Va.....	1
Grafton, W. Va	3	Williamsport, Pa	2
Gordonsville, Va.....	3	Warrenton, Va	3
Gaithersburg, Md.....	1	Winchester, Va.....	1
Greensboro, N. C.....	1	Wilmington, Del	2
Harrisburg, Pa	18	Wilkes Barre, Pa.....	1
Hagerstown, Md.....	3	Weldon, N. C.....	3
Hollins, Md.....	1	Wheeling, W. Va	1
Harrisonburg, Va.....	1		
Hamilton, Va.....	1	Total	622
Harper's Ferry, W. Va	1		

AGENT OF THE HUMANE SOCIETY.

METROPOLITAN POLICE HEADQUARTERS,
Washington, D. C., July 1, 1891.

Maj. WILLIAM G. MOORE,
Superintendent Metropolitan Police:

SIR: In obedience to your order of July 9, 1890, I assumed the duties of agent of the Humane Society, succeeding Charles W. O'Neill, resigned.

Sensibly appreciating your confidence in my ability for the work assigned me, I entered upon the discharge of my duties with the determination to perform the same to the best of my ability. In submitting this my first annual report I desire to state that numerous cases of distress and depravity have come under my observation, and I have earnestly endeavored to exercise all proper discretion in the disposition of those cases that in my judgment called for assistance.

I have been frequently called upon by wives and mothers who reported that their husbands spent all their earnings dissipating and allowed their families to suffer for the necessities of life. It would, indeed, be humane, if Congress would enact a law similar to that now in force in the State of New York governing such cases. Such a law would relieve much suffering among unfortunate mothers and little ones, and its wholesome influence be felt by the community.

In the interest of moral progress, I would respectfully recommend that the law conferring power upon the Humane Society to take charge of children found in houses of ill-fame be so amended as to apply to children surrounded by immoral influences, as in cases where men and women are living in adultery and have children living with them.

I concur in and earnestly urge the suggestion of my predecessor, that parents or guardians should be required by law to send their children or wards, between the ages of 6 and 14 years, to school for at least 6 months in a year.

My experience in this new work has impressed me more than ever, the great need of a reform school for girls, and I would earnestly recommend the establishment of such an institution. At present the only places of detention for wayward inclined girls are the House of the Good Shepherd and the House of Mercy, and colored girls are not admitted to these institutions.

In this connection I would suggest that persons placing their daughters and wards in the care of the good sisters of the institutions above mentioned be required by law to relinquish them for a stated period, say for one or more years, or during minority.

I would also suggest that the law for the protection of children be amended so as to give the police court power to dispose of the cases brought before the judge of the said court, instead of committing the defendants for the action of the higher court. I regard this recommendation as very important, as in most cases the judgment of the police court would be final, as no appeal would be taken and much time and expense could be saved.

In conclusion I desire to express my thanks to the superintendents and matrons of the various charitable homes and asylums for children in this District, for their kind attention and courtesy in receiving the poor unfortunate little ones that I have been called upon to provide for. Proper acknowledgment is due to Mr. P. B. Sweeney of the Newsboys and Children's Aid Society, for his considerate assistance on many occasions in providing temporarily for children before they could be placed permanently in some home or asylum.

I respectfully submit the following report of the number and disposition of cases investigated for the year ending June 30, 1891:

Number of cases investigated.....	300
Number of persons prosecuted	<u>7</u>
Number of persons fined.....	1
Number of cases sent to grand jury.....	2
Number of persons execution of sentence suspended and personal bonds taken...	1
Number of cases nolle prosequi entered	1
Number of cases dismissed	2
Amicably adjusted.....	293
Total.....	<u>300</u>

	White.		Colored.		Total white.	Total colored.	Total.
	Male.	Female.	Male.	Female.			
Abandoned infants sent to St. Ann's Infant Asylum	1				1		1
Abandoned infants sent to other homes provided			2	1		3	3
Children taken from parent or guardian and committed to St. Ann's by order of police court	2	1			3		3
Children taken from parent or guardian and committed to Washington City Orphan Asylum by order of police court	1	1			2		2
Children sent to German Orphan Asylum		3			3		3
Children taken from parent or guardian and committed to Washington Asylum by order of the police court			2			2	2
Total	4	5	4	1	9	5	14
Children taken from parent or guardian by Society's agent							146
Number of children committed:							
To German Orphan Asylum	1	4			5		5
House of Good Shepherd		8			8		8
House of Mercy		4			4		4
Newsboys' Home	5				5		5
Industrial Home School	20	10			30		30
St. Joseph's Orphan Asylum	2				2		2
National Colored Home			7	1		8	8
Reform School	6				6		6
St. Ann's Infant Asylum	1	3	4	5	4	9	13
St. Vincent's Orphan Asylum		3			3		3
Washington Asylum			4	1		5	5
Washington City Orphan Asylum	11	14			25		25
Washington Hospital for Foundlings	3	4			7		7
Other homes	1			2	1	2	3
Colored Infant Asylum			12	7		19	19
Home for Friendless Colored Girls				2		2	2
St. Mary's Industrial Institute, Baltimore	1				1		1
Total	51	50	27	18	101	45	146

Respectfully submitted.

SAMUEL WILSON,
Agent Humane Society.**POLICE PATROL BOAT.**HARBOR MASTER'S OFFICE,
POLICE PATROL BOAT WHARF,
Washington, D. C., June 30, 1891.W. G. MOORE,
Major and Superintendent Metropolitan Police :

DEAR SIR: The work attending the police patrol-boat service for the fiscal year 1891 has been performed by the Harbor Master, as commander, with a crew consisting of 1 engineer, 1 deck hand, 1 watchman, and 3 police officers. During that period the little craft has undergone its first overhauling, including the construction and placing of a new boiler, which rendered it better capacitated for the variety of business and labor it has been called upon to perform. The vessel is too small to tow heavier boats in case of accident, to clear the Potomac channel by force, or to break ice in the winter season. It has not the capacity to carry or operate a force pump such as is required in case of fire. A boat for these purposes is needed in the District harbor, as has already been plainly demonstrated. An iron boat, with all modern police, harbor, and fire equipments, such as is employed in other cities, can be purchased for about \$60,000, and I urge that an appropriation for such be asked of Congress. Its maintenance, including the salaries of the Harbor Master, 2 pilots, 2 engineers, 3 fireman, and 8 deck hands, would cost about \$20,000 per annum.

Complaints of violations of the fish and game laws have ceased. Steamboat and ship owners no longer find difficulty in securing a clear channel, while gambling and disorder about the wharves has been broken up. That some idea may be had of what has been accomplished in detail during the past year, I herewith include an abstract from the boat's log-book:

1890.

- July 13. Recovered body of Richard Jackson, suicide.
- July 22. Recovered body of Thos. Coombs, drowned.
- July 23. Recovered a lost bateau; assisted the steamer *Pentz*.
- July 25. Cleared the channel during a prevailing south wind.
- Aug. 1. Recovered body of Louis Upperman, drowned.
- Aug. 4. Recovered body of Thomas Howard, drowned.
- Aug. 8. Boiler of patrol boat gave out.
- Aug. 9. Employed the United States Fish Commission boat *Blue Wing*.
- Aug. 11. Assisted the United States marshal in libel of dredge boat.
- Aug. 17. Rescued a forlorn sail boat.
- Aug. 19. Removed a schooner from the Great Falls Ice Company's wharf.
- Aug. 19. By authority of the Commissioners, sold the old boiler and findings of the patrol boat at auction for \$49.25.
- Sept. 5. Moved the *Peri* out of the channel.
- Sept. 7. Recovered the drowned bodies of Elisha Alvey and R. F. Bradley.
- Oct. 5. Drove the prize fighters beyond the District line.
- Oct. 9. Dragged for the body of a suicide.
- Oct. 10. Recovered the drowned body of Robert Speer.
- Oct. 13. Placed new boiler in the patrol boat.
- Oct. 30. Boat at work, with new machinery.
- Oct. 30. Arrested two drunkards.
- Nov. 8. Returned the borrowed boat *Blue Wing* to the Fish Commission.
- Nov. 14. Arrested R. Mester for assault.
- Nov. 19. Moved two vessels from the river channel.
- Nov. 22. Moved two vessels from the channel.
- Nov. 27. Arrested E. W. Ragan, alias Doty Ragan, and Joe Dunn, for petit larceny, and recovered part of the property.
- Nov. 28. Attended court and convicted the forenamed parties.
- Dec. 3. Assisted the *Jane Mosley*, on fire, loss \$100.
- Dec. 9. Thomas Walton and William Brown, confidence men, arrested.
- Dec. 10. At court.
- Dec. 12. Towed a sloop, broken from anchor, to safety.
- Dec. 16. Cleared the channel of a barge.
- Dec. 17. Heavy storm, boats stopped in harbor.
- Dec. 26. Severe weather until January 18. Worked on boat house.

1891.

- Feb. 1. Charles R. Chiseldine rescued from drowning—in a skiff—gale of wind.
- Feb. 9. James Conway, of *Pilot Boy*, sent to hospital.
- Feb. 11. Assisted in recovery of body of Christopher McGuire, drowned.
- Feb. 12. Sent Josiah Morgan, sailor, to hospital.
- Feb. 16. Removed Charles Jackson, shot, to hospital.
- Feb. 26. Assisted engineer department, making soundings.
- Feb. 28. Moved schooner from channel.
- Mar. 23. Rendered assistance to *George Leary*—broke her shaft.
- Apr. 7. Prevented extension of a wharf.
- Apr. 8. To Georgetown, and prevented illegal encroachments.
- Apr. 8. Published harbormaster's laws.
- Apr. 13. Recovered drowned body of Max Sparks.
- May 1. Investigating complaints reference to O street wharf.
- May 3. Recovered drowned body of Charles Smith, fisherman.
- June 3. Arrested boys bathing in city.
- June 4. Recovered drowned body of unknown colored man.
- June 6. Enforced the fish law.
- June 14. Arrested two persons for fighting.

Respectfully,

J. R. SUTTON,
Commanding Patrol Boat.

METROPOLITAN POLICE DEPARTMENT.

SURGEON'S ROOM.

Washington, D. C., August 7, 1891.

Maj. WILLIAM G. MOORE,
Superintendent Metropolitan Police :

SIR: I beg leave to submit the report of examinations of applicants for the police force of the District of Columbia, made by your board of surgeons during the fiscal year ended June 30, 1891.

Number examined	259
Number accepted	89
Number rejected	170
Per cent. accepted	34.36
Rejected	65.63

Respectfully submitted.

C. H. A. KLEINSCHMIDT,
Secretary Board of Surgeons.

G.

REPORT OF THE CHIEF ENGINEER OF THE FIRE DEPARTMENT.

WASHINGTON, *June 30, 1891.*

GENTLEMEN: I have the honor to submit my sixth annual report since my incumbency, showing in detail the operations of the department for the fiscal year ending June 30, 1891:

OFFICERS OF THE DEPARTMENT.

Joseph Parris, chief engineer; Louis P. Lowe, first assistant chief; William T. Belt, second assistant chief; William O. Drew, fire marshal; Jilson D. Entwisle, clerk.

ENGINE HOUSES.

There are eight engine houses and two truck houses used by the department, all in good condition, with the exception of Nos. 2 and 4; these two houses occupied by the Department are, I think, scarcely suited for the purpose for which they are used. I have included in my estimates an appropriation for \$12,000 for a new house for No. 4 company. The former is also badly ventilated and without sufficient room. I am compelled to do the best I can under the circumstances, until some more commodious and comfortable quarters are obtained.

DISCIPLINE.

Discipline and good conduct have been of paramount importance in governing the department. Occasions have been presented, however, to pass official reprimand upon certain members for unbecoming conduct. Some have been dismissed as unworthy of men called to guard the lives and property of their fellow citizens. I am determined to enforce the observance of rules and obedience to officers, which can alone make a department like this effective; and it is a duty I owe to the public, where rules are disregarded, to promptly bring the offender to justice. Neglect to do this would tend to demoralize the department. The men have been regularly drilled during the year. All persons appointed to positions in the department are required to serve a term of twelve months on probation, and pass a quarterly examination as to duties required.

PAY AND PROMOTION.

I have the honor to state that the members of the department have received no increase of pay, except \$5 per month, since its organization. They are required to live in close proximity to the engine or truck house

to which they are assigned for duty. The improvements and advance in real estate has made it hard for them to have for their families anything but the plainest necessities. Rents have advanced in proportion to the value of property; each man has to purchase on an average four suits of clothes a year, besides having \$1 deducted from his pay each month for the benefit of the firemen's relief fund. If no relief is granted the pleasure of having home and family will be denied them, on account of the meager compensation received for services that are invaluable to the community. In answer to letters addressed to eleven cities I find that in ten of them the pay is very much larger than the advance asked for in the estimates. I renew my request for the promotion of eleven privates to the rank of assistant foremen and eleven privates to the rank of assistant hostlers, with a corresponding increase of pay. The assistant foreman, in the absence of the foreman, has to assume all the responsibilities, and in my opinion the promotion and increase of pay is no more than just, in consideration of additional services.

EXCHANGE OF ENGINE.

There is in the department one old-style engine that could be profitably exchanged for one improved engine; and I respectfully recommend that the sum of \$4,000 be appropriated for the purpose of effecting the exchange. This amount is included in the estimates.

NEW COMPANIES.

Washington has outgrown its fire department. There is absolute need of more companies and larger engines. The department, as at present organized, consists of 1 chief engineer, 2 assistant chiefs, 1 fire marshal, 1 clerk; 8 engine companies, 10 men each; 2 truck companies, 12 men each; 1 truck company, 11 men; and 1 chemical company, 3 men; total number of men, including 6 watchmen, 130; 2 reserve engines, 1 located at No. 8 engine house, and 1 at truck B; 2 reserve hose carriages, 1 at No. 7 engine house, 1 at No. 4 engine house; 1 reserve truck, located at truck C house. The size and capacity of the engines are as follows: Three second size, 700 gallons per minute; 1 third size, 650 gallons per minute; 1 third size, 500 gallons per minute; 3 fourth size, 450 gallons per minute. Now this department, small in numbers and small in capacity of its engines, has to cover an area 72 square miles to 46,274 houses and 236,000 inhabitants, including all of the General Government buildings with their valuable records. In the past it has only been by the untiring energy and watchfulness of its officers and men that fires have been kept in bounds, but with the rapid growth of the city from two and three-story buildings to eight and ten stories they can not hope to do so longer, as at every large fire the rest of the city is left without any protection whatever, and should another fire take place in any thickly built up part of the city it is doubtful whether any company or companies could be sent from the first fire in time to prevent a serious fire from taking place; indeed, if they could be spared at all.

It is often that the entire department is called out of quarters at the same time by two or more alarms following closely on another, and should the fire at either one of these alarms prove to be large there is no reserve force to call for a general second or special alarm. No fire department can safely protect a city when the demands upon it are greater than it can supply, whether it be for one or two fires. As an illus-

tration, any of the large modern buildings erected or being erected in the city, once getting a fire well started in them, would call for the whole department to work upon it; and should the building become wrapped in flames from bottom to top and the fire begin to spread from it either through the adjacent square or across the street, which it is liable to do in tall buildings at any time, I have no reserve of fresh men or apparatus in quarters to call upon to send to the exposed and threatened points of danger, but have to draw my forces from point to point of danger to protect others. And when a chief officer has to divide up a small force to protect many threatened and exposed places he can not subdue any. And nothing in the working of firemen is more fatiguing and trying to them in the time of a fire than to have to move apparatus from one place to another, besides the valuable time lost in moving them, taking up lines of hose to be conveyed from one place to another. The time consumed in doing so can never be recovered.

The liability of large fires in the business part of the city is greater now than ever before and growing more so every day, and requires more companies to be located centrally to insure more immediate protection to the valuable property in that location, as the class of buildings now being erected, and the material with which they are stored, admits of no delay on the part of the department being located too far from them, as there is a vast difference in extinguishing fires in three and four story buildings to those of eight and ten stories, with their large elevator shafts and stair wells furnishing beautiful chimneys to convey smoke and flame from the bottom to top and through every part of them. Besides the business portion, there is the great residence portion expanding and extending beyond the old boundary lines. Look at the vast territory north of M street, west of Tenth street, east of Rock Creek, south of Park street and Whitney avenue, with its thousands of dollars' worth of property and some of the most costly residences in the city, not one fire company in it; also at the vast northeastern section with its valuable property, not a fire company in it; and Anacostia, a city in itself, none; West Washington, only one.

To place the fire department in condition to meet the requirements of the city it should consist of 15 engine companies, 6 truck companies, 4 chemical companies, 3 reserve engines, 3 reserve hose carriages, 2 reserve trucks, and a working force of 230 members, including officers and men. The engines to be first, second, and third size; capacity 1,100, 700, and 500 gallons, respectively, per minute; the trucks to be all aerial. It is simply a condition of things that should not exist in the capital city of the nation, that whenever there is a large fire or one or more fires at the same time calling out the eight engine and two truck companies, there is no reserve force to protect the lives and property of its citizens left unprotected by the companies responding to the first fires, or to send to any one of them should more help be necessary. The city has only 1,157 fire plugs in it, and should have at least 2,000. One should be located at the intersection of every cross street in the city, and one at the entrance of every large alley. In the business section two plugs should be located at the intersection of every cross street and two in the center of each square. The great success with which fires have been handled in the past by the fire department has led some people to believe that it is impossible for a fire to get away from it, and that to a great extent has blinded them to the real condition of things. The conditions do exist, and the opportunity only is wanted to demonstrate to them that it can not cope with one large fire, much less two.

WATCHMEN.

I respectfully recommend that four additional watchmen be provided for in addition to the six already employed. There are four privates in the department partly disabled from long service, and it is desired for the efficiency of the service that strong, active men should take their places and they be appointed to the above positions as a recognition of past services.

ADDITIONAL PRIVATES.

I have the honor to repeat my recommendation that two additional privates be appointed to each engine company and one to each truck company, thereby making the number to each company twelve instead of ten, as at present. The addition of these men I consider necessary for the more effectiveness of the department.

RELIEF FUND.

My predecessor, as well as myself, has called your attention to the importance of some legislation that would practically make this a relief fund.

I would not continue to recur to the subject year after year were it not that the men who have given their whole lives to the service and have faithfully paid \$1 per month to the relief fund would, in case of accident, receive no benefit, or in case of death nothing would be left for their families; besides, the business is so hazardous that first-class insurance companies will not take risks on their lives, thus leaving this their only dependency in case of accident. At present \$128 is deducted from the pay of the men, and the pension roll amounts to \$140, reducing the small surplus \$12 per month. The surplus in the United States Treasury amounts to \$2,400, invested in bonds, and \$172.92 cash on hand.

Statement of firemen's relief fund.

RECEIPTS.

Balance June 30, 1890	\$176. 92
Interest on United States 4 per cent bonds	51. 50
Interest on District of Columbia 3.65 bonds	36. 50
Fines received from firemen	90. 00
Amount retained from pay of firemen	1, 520. 17
	1, 875. 09

PAYMENTS.

\$150 United States 4 per cent bond	\$180. 75
Payment of pensions	1, 521. 42
	1, 702. 17
Cash balance	172. 92
Bonds on hand June 30, 1890:	
United States 4 per cent bonds	1, 400. 00
District of Columbia 3.65 bonds	1, 000. 00
Total	2, 572. 92

I would respectfully recommend that an annual appropriation be made to pay the invalids and widows of firemen, but any relief you may, in your wisdom, see fit that would offer help to these dependent persons would be preferable to the present law.

APPLICATIONS.

During the year there were fifty-five applications for positions in the department; twenty-two were reported as qualified by the board of surgeons, and sixteen appointments were made.

RESIGNATIONS.

On July 15 Surg. J. W. Bayne resigned; August 31 Private John H. Steep, of Engine No. 5, resigned; March 31 Private James Kenny, of Engine No. 1, resigned; May 28 Private Casper I. Misel, of Engine No. 2, resigned.

OFFICER IN CHARGE OF APPARATUS REPAIRS.

I have the honor to recommend that a practical machinist and engineer be employed to take charge of repairs to all apparatus, respond to alarms of fire, and make an inspection of the workings of each engine at fires; also a daily tour to each house and inspect all the apparatus. He will be charged with the control and direction of employés assigned to duty under him, note and report all derelictions or incompetency on the part of employés, and see that the time of all assigned him is employed to the greatest advantage to the department. He shall be subject to the rules and regulations for the government of the fire department and the orders of the chief engineer. I therefore recommend that such an officer be employed at a salary of \$1,200 per annum.

PROMOTIONS AND DISMISSALS.

Joseph O. Guy was promoted to foreman, Timothy Donohue to tillerman, Patrick Mahaney to hostlers, August 13, 1890. One member of the department was dismissed.

HORSES.

The stock belonging to and in use by the department consists of fifty-three. Eight were condemned and turned over to the property clerk, one died, and thirteen were purchased. They are distributed as follows:

Eight engine companies.....	32
Two truck companies	6
Two fuel wagons	2
Used by officers	4
Extras.....	9
Total	53

The horses designated as extras are kept as substitutes in case of sickness or accident.

Quite a large number of horses in the department are scarcely fit for service; they are old and as a general thing used up, and require to be replaced by new ones.

REPORT OF THE DISTRICT VETERINARIAN.

WASHINGTON, D. C., November 1, 1891.

SIR: I have the honor to transmit the following report as veterinarian to your department for the fiscal year ending June 30, 1891.

Owing to the unnatural conditions which horses are exposed to in fire-department service they are subjected to numerous diseases.

Influenza is endemic among the horses of this city, and appears in a variety of forms at different seasons. The disease known as osteoporosis has given a great deal of trouble, and is the disease which fire horses suffer most from, it being a disease in which the bones become porous or assume a worm-eaten condition, running a slow course and generally terminating by leaving the animal too stiff for active service. From this disease one animal had to be destroyed.

During the past year your veterinarian erected a veterinary hospital for his own private use. The District having no accommodation of their own was offered the use of this establishment, which was accepted by all departments of the District government, the fire department alone sending 50 animals to hospital for treatment, which were at hospital on an average of about sixteen days each, or a total of seven hundred and ninety-two days.

These animals were suffering with the following diseases: Colds, coughs, pneumonia, rheumatism, influenza, colic, constipation, diarrhea, laminitis, corns, nails in feet, injuries from falls, tetanus, nervous prostration, general debility, diabetes, retention of urine, variola, eczema, thrush, and lameness from various other causes.

Below will be found a list of the horses, their location, and condition:

Engine house.	Number of horses.	Good.	Fair.	Bad.	Engine house.	Number of horses.	Good.	Fair.	Bad.
No. 1	6	4	1	1	No. 7	5	5	.....	.....
No. 2	6	4	1	1	No. 8	5	4	1	.....
No. 3	4	3	1	.....	Truck A	5	3	2	.....
No. 4	6	4	1	1	Truck B	5	3	1	1
No. 5	6	4	1	1	Total	53	38	10	5
No. 6	5	4	1	.....					

It will be seen by the above that we have 38 horses in good condition and fit for any service required, 10 which are still used as extra, and 5 that are totally unfit for service and should be replaced at once.

I would draw your attention to the fact that all horses about to be purchased by the District government have to be inspected by your veterinarian, in addition to treatment of sick horses. This work consuming a great deal of time, I would respectfully ask that the salary be increased to \$1,000.

I would recommend that all horses purchased by the District government be branded on left shoulder with the letters "D. C.," and when condemned to be sold branded "I. C." In my judgment this should be done for the protection of District property.

Very respectfully,

C. B. ROBINSON, V. S.,
Veterinarian to District of Columbia.

APPARATUS.

The apparatus of the department consists of 10 engines, 8 in service and 2 in reserve; 10 hose carriages, 8 in service and 2 in reserve; 3 fuel wagons, 2 in service and 1 in reserve, it being old and in bad condition; 3 hook and ladder trucks, 2 in service and 1 in reserve. Two new aerial trucks were purchased and 1 old truck turned over to the property clerk, with no appliances; 1 Holloway chemical engine, capacity 160 gallons. Three hose carriages have been thoroughly overhauled, rebuilt, painted, and changed from old-style straight frame to crane neck, making all crane-neck carriages. Attached to each of three carriages are two 3-gallon fire extinguishers. Attached to each of five carriages are two 6-gallon fire extinguishers. Attached to one truck are four 5-gallon extinguishers. Attached to one truck are two 15-gallon fire extinguish-

ers, 2 Empire life-saving belts, and 4 life-saving belts. One wagon for use of the chief engineer, one wagon for use of fire marshal, and one wagon each for use of the assistant chief engineers. One new supply wagon was built during the year, and one new wagon for the chief engineer.

Fire extinguishers on hand at end of fiscal year June 30, 1891.

Hose carriages.	Name of maker.	Capacity.	Hose carriages.	Name of maker.	Capacity.
		Gallons.			Gallons.
No. 1	Babcock	6	No. 6	Holloway	3
No. 2	Holloway	3	No. 7	do	6
No. 3	do	6	No. 8	Babcock	3
No. 4	do	6	Truck A	Holloway	5
No. 5	do	6	Truck B	do	15

Two and three way Siamese, with 3-inch leading hose, are used by the department.

HOSE.

Eureka Fire Hose Company:	Feet.
Paragon brand, in good condition	7,300
Paragon brand, in fair condition	3,600
Fabric Fire Hose Company:	
Keystone brand, in good condition	1,650
Keystone brand, in fair condition	950
Patrol brand, in fair condition	200
Arrow brand, in fair condition	100
Goodyear Rubber Company:	
Bay State jacket brand, in fair condition	3,100
Hamilton Rubber Company:	
Hercules brand, in good condition	1,650
Gutta-Percha and Rubber Manufacturing Company:	
Maltese cross brand, in good condition	1,600
Different kinds, unfit for service	3,100

Turned over to the property clerk, condemned as unfit for service, 1,050 feet. There was purchased for use of the department during the year the following:

	Feet.
Paragon	3,100
Maltese cross	500

Which was distributed to the following engine companies:

	Feet.
Maltese cross hose, No. 2	500
Paragon hose:	
No. 1	1,100
No. 3	700
No. 4	1,000
No. 8	300

Hose on hand at end of fiscal year June 30, 1891.

Engine company.	Good.	Fair.	Bad.
	Feet.	Feet.	Feet.
No. 1	2,000	1,650	200
No. 2	1,000		
No. 3	1,300	1,650	50
No. 4	1,300	1,600	200
No. 5	1,800	400	1,400
No. 6	1,550		100
No. 7		2,350	700
No. 8	2,850		450
Loaned to Mount Pleasant Company	700		
Total	12,500	7,650	3,100

116 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Statement of number of alarms, working hours of engines, ladders raised, etc.

Companies.	First alarms.	Second alarms.	Special alarms.	General alarms.	Hours engine worked.	Local alarms.	Hose laid.	Hose burst.	Ladders raised.	Times extinguishers used.	Transfers.
Engine company:					H. m.		Feet.	Feet.	Feet.		
No. 1	115				29 50	20	15,550	150	48	8	....
No. 2	60	1	1		21 21	25	12,300	200	72	8	....
No. 3	74	1		3	6 50	8	10,850	350	36	2	....
No. 4	50			1	19 30	17	13,900	300	90	2	....
No. 5	45			2	15 40	13	8,150	100	48	2	....
No. 6	96	2			22 20	13	16,650	250	168	12	....
No. 7	95	2		2	16 25	18	11,000	100	90	17	....
No. 8	33			1	10 30	9	5,100	200	30	7	1
Truck companies:											
A	104	1		1		1			1,288	2	....
B	89	1	1	2		3			1,185	10	....

Total number of alarms, etc., during the year ending June 30, 1891.

Responded to:	
Fire alarms	191
Local alarms	140
Hose laid	feet 93,500
Ladders raised	do 3,055
Times extinguishers used	70
Transfers	1
Engines worked	hours 143

Description of steam fire engines and trucks.

Engines.	Style of engine.	Class.	Built by—	Placed in service.	Weight as drawn to fires.	Cylinder.	Pump.	Gallons per minute.
					Pounds.	Inches.	Inches.	
No. 1.....	Double upright crane-neck piston.	Second	Amoskeag Co.	Dec. 9, 1886	8,200	6½ by 8	4½	700
No. 2.....	Upright crane-neck double pump piston.	Second	Clapp & Jones	Oct. 30, 1888	8,005	8½ by 7	5 by 7	700
No. 3.....	Double pump upright crane-neck piston.	Third	do	Nov. 16, 1889	7,060	7 by 7	4½ by 7	500
No. 4.....	Crane-neck rotary.	Third	Silsby Manufacturing Co.	Sept. 9, 1879	7,250	11 by 5½	7½	600
No. 5.....	Single horizontal piston.	Fourth	Clapp & Jones	Nov. 17, 1883	6,200	8 by 8	4½	450
No. 6.....	Upright crane-neck double pump piston.	Second	do	Nov. 18, 1889	7,940	8½ by 7	5 by 7	700
No. 7.....	Single horizontal piston, straight frame.	Fourth	do	Jan. 17, 1885	6,045	8 by 8	4½ by 8	450
No. 8.....	Single horizontal piston.	Fourth	do	Nov. 25, 1884	5,938	8	4½	450
Reserve 2..	Double horizontal piston, straight frame.	First	do	June 24, 1879	8,700	8 by 8	4½	700
Reserve 6..	Single horizontal piston.	Third	do	Jan. 19, 1876	6,850	9 by 8	5½	550

Trucks.	Ladders.		Built by—	Placed in service.	Weight as drawn to fires.
	No.	Feet.			Pounds.
A	14	305	La France Fire Engine Co	June 30, 1891	8,500
B	13	315	Babcock Manufacturing Co	Mar. 19, 1877	9,000
Reserve A	12	244	Buckley & Merritt	Feb. 21, 1879	8,855

Location of engine and truck houses.

Engine companies:

- No. 1, K street, between Sixteenth and Seventeenth streets NW.
- No. 2, D street, between Twelfth and Thirteenth streets NW.
- No. 3, Delaware avenue and C street NE.
- No. 4, Virginia avenue, between Four-and-a-half and Sixth streets SW.
- No. 5, M street, between Thirty-second and Potomac streets, West Washington.
- No. 6, Massachusetts avenue, between Fourth and Fifth streets NW.
- No. 7, R street, between Ninth and Tenth streets NW.
- No. 8, North Carolina avenue, between Sixth and Seventh streets SE.

Truck companies:

- A, North Capitol street, between B and C streets NE.
- B, New Hampshire avenue and M street NW.

EXPENDITURES.

The expenditures for the department, as per books of the auditor of the District of Columbia, for the year ending June 30, 1890, were as follows:

Salaries.....	\$108, 123. 91
Repairs of engine houses	2, 997. 41
Repairs to apparatus.....	2, 852. 73
Hose	2, 980. 00
Purchase of horses	3, 525. 00
Fuel.....	1, 977. 34
Forage	4, 122. 49
Contingent expenses.....	7, 988. 35
Two aerial turntable trucks.....	6, 924. 00
Erection of truckhouse and necessary furniture	17, 572. 79
Total	159, 064. 02

Salaries of officers and employes.

Officers and employes.	No.	Salary per annum.	Officers and employes.	No.	Salary per annum.
Chief engineer.....	1	\$1, 800	Hostlers	12	840
Assistant chief engineers.....	2	1, 200	Firemen	8	840
Fire marshal.....	1	1, 000	Privates	76	800
Clerk	1	900	Watchmen.....	6	000
Foremen.....	11	1, 000	Veterinary surgeon.....	1	400
Engineers of steamers.....	8	1, 000			
Tillermen.....	3	840	Total.....	130	

FIRE PLUGS.

The necessity of more fire plugs can not be overestimated. With the water permeating every section of the entire city, and an adequate number of fire plugs, comparative safety would be insured and many serious conflagrations avoided. The vast area of the city demands immediate attention to the matter. In the rural districts fire plugs are almost unknown, yet the residents there expect in case of need the assistance of the department. The total number of fire plugs in the District at present is 1,157, which is insufficient for protection from fire. I respectfully recommend that the addition of at least 200 is necessary, they being located in suitable places, as our lead of hose in the heart of the city on an average is about 700 feet.

Casualties.

Companies.	Position.	Name.	Date.	Box.	Days off duty.	Injury.
Engine company:						
No. 1.....	Assistant foreman.	J. A. Walsh...	Mar. 25	147	13	Sprained wrist.
No. 2.....	Private.....	C. Reinhardt..	July 9	435	17	Lumber falling on foot.
No. 3.....	Watchman ..	James Lowe ..	Apr. 29	.....	62	Broken leg; on his way home.
No. 4.....	Private.....	Z. Williams ...	Feb. 6	.....	4	Nail of one finger pulled off opening plug at drill.
No. 5.....	do	C. E. Harper ..	July 7	314	41	Back sprained falling from balcony.
No. 5.....	do	W. T. Mahoney	July 7	314	101	Head hurt and ribs broken falling from balcony.
No. 6.....	Assistant foreman.	A. A. Brown ..	Dec. 25	17	4	Bruised hip, thrown from hose carriage in collision.
No. 6.....	Hostler.....	J. O'Leary	Mar. 5	.....	11	Sprained back; fell from ladder of hay-loft.
No. 6.....	do	do	May 13	.....	8½	Bit on hand by horse.
No. 7.....	Private.....	J. L. Martin...	Jan. 1	319	3	Fingers cut with glass.
Truck company:						
A	Private.....	T. R. Newman	Dec. 19	134	64	Leg broken by cable car colliding with truck. Died Feb. 21 from this injury.
A	do	G. R. Ash	Dec. 19	134	5	Back sprained.
A	Foreman.....	S. R. Henry ...	Dec. 25	17	24	Leg cut.
B	Private.....	Thos. Griffin ..	Aug. 10	127	15	Sprained ankle on sliding pole.
B	Foreman.....	John Sherman	Oct. 8	.....	53	Fell from stepladder in quarters.
B	Hostler.....	P. Mahaney...	Jan. 1	319	102	Hand cut by falling slate.

List of alarms of fire from 1880 to 1891; number of buildings each year; population in 1880-'90 and 1891.

Year.	Alarms of fire.	Buildings.	Population.
1880	109	30,474	177,638
1881	97	.....	.....
1882	125	.....	.....
1883	152	.....	.....
1884	146	.....	.....
1885	185	.....	.....
1886	169	.....	.....
1887	186	.....	.....
1888	174	.....	.....
1889	168	41,517	.....
1890	207	43,969	229,796
1891	191	46,274	235,596
Increase in eleven years.....	.....	15,800	57,958

Annexed will be found a statement of the fire marshal, William O. Drew, in relation to storage and grade of illuminating oils, etc.; also detailed statement of fires, losses, and insurance for the year ending June 30, 1891.

There were 191 alarms for fire and 140 local or still alarms; the estimated loss entailed was \$165,803, covered by an insurance of \$84,993, against a loss of \$113,191, covered by an insurance of \$73,873, of the previous year.

In conclusion I beg to return thanks to the Commissioners for the uniform courtesy at all times extended me, also to my two assistant

chiefs and the officers and men under their command; to the major, officers, and members of the police force; to the superintendent of the fire alarm, etc., and the operators connected with the office, all of whom have rendered valuable service, making it easier for me to fulfill the various and important duties intrusted to me.

Very respectfully,

JOSEPH PARRIS,
Chief Engineer.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

ESTIMATES FOR THE FIRE DEPARTMENT FOR FISCAL YEAR ENDING JUNE 30, 1893.

WASHINGTON, *July, 1891.*

GENTLEMEN: I have the honor to submit my estimates for the expenses of the fire department for fiscal year ending June 30, 1893.

	Appropriation for fis- cal year ending June 30, 1892.	Appropriation asked for fiscal year ending June 30, 1893.
Chief engineer	\$1,800	\$2,500
Two assistant chief engineers	(\$1,200 each) 2,400	(\$1,500 each) 3,000
One fire marshal	1,000	1,200
One clerk	900	1,200
Eleven foremen	(\$1,000 each) 11,000	(\$1,200 each) 13,200
Eight engineers	(\$1,000 each) 8,000	(\$1,150 each) 9,200
Eight firemen	(\$840 each) 6,720	(\$930 each) 7,440
Three tillermen	(\$840 each) 2,520	(\$930 each) 2,790
Twelve hostlers	(\$840 each) 10,080	(\$930 each) 11,160
Seventy-six privates	(\$800 each) 60,800	(\$900 each) 68,400
Six watchmen	(\$600 each) 3,600	(\$720 each) 4,320
One veterinary surgeon	400	1,000
Total	109,220	125,410

Eleven assistant foremen, \$960 each	\$10,560
Eleven hostlers, \$930 each	10,230
One machinist in charge of repairs to apparatus	1,200
Four watchmen, \$720 each	2,880
Total	24,870

Repairs to engine houses	4,000
Repairs to apparatus and new appliances	3,000
Hose	3,000
Fuel	3,000
Horses	4,000
Forage	8,500
Contingent expenses, including office rent, horseshoeing, furniture, fixtures, washing, oil, medical and stable supplies, harness, blacksmithing, labor, gas, and other necessary items	8,000
New house for No. 4 engine company	12,000
Exchange one engine	4,000
Total	49,500

Houses, lots, and furniture for two new engines and one truck company	66,000
Two new engines (\$4,500 each)	9,000
Two new hose carriages (\$900 each)	1,800
Three foremen (\$1,200 each)	3,600
Two engineers (\$1,150 each)	2,300
Three assistant foremen (\$960 each)	2,880
Two firemen (\$930 each)	1,860
One tillerman	930
Three hostlers (\$930 each)	2,790
Twenty-two privates (\$900 each)	19,800
Eleven horses (\$275 each)	3,025
Total	113,985

One Aerial turntable truck, to replace old-style truck	3,500
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The scope of these increases has already been fully explained in my last annual report, but in view of their importance and the interest felt in their adoption, I shall not hesitate to respectfully repeat what I have already said, and to recur to the subject as often as may seem necessary.

If your honorable body will consider the vast difference between the pay of a fireman and that of a policeman, you will see that the latter does not receive this additional compensation for additional services, for he can go to his family every six hours; whereas a fireman is only allowed the pleasure of his family one day in every six, except when at a hurried meal. I do not wish to be understood as saying that the police get too much, but that the firemen get too little.

Should you deem it expedient to grant this increase, which only amounts to \$16,190 per annum, divided amongst so many faithful servants of this community, you would not only bestow that which is due for their services, but in view of the high rents and increased price of all necessities of life, it would really be a charity. The men are required to pay all their just debts, and to do so on their meager pay they are compelled to deny themselves and their families everything but the plainest necessities of life.

To place the department on a good footing each company should have 12 men. I have estimated for 11 assistant foremen at a compensation of \$960 per annum, and 11 hostlers at \$930 per annum. I desire to state that privates have been detailed to fill these places, with all the extra labor and responsibilities, without any extra compensation. Privates should be promoted to these places, and new men appointed to fill the vacancies made by these promotions, thus giving the required number to each company.

In asking for a machinist and engineer, under the direction of the chief of department, at a salary of \$1,200 per annum, I feel confident that the saving to the apparatus would more than justify the outlay.

I respectfully recommend that 4 additional watchmen be provided for, in addition to the 6 already employed. There are 4 privates in the department partly disabled from long service, and it is desirable for the efficiency of the service that strong, active men should take their places, and they be appointed to the above positions as a recognition of past services.

In estimating for a new house for No. 4 engine company on its present site, I do so in the interest of the health of the men and as a saving to the District, as the present old building is of a nature that would hardly be allowed to exist in any but a public building. I earnestly request that you give this your favorable consideration, as I deem it of the utmost importance.

In asking for an increased amount for forage, I do so on account of the high price of all kinds of horse food. The appropriation for the present year will be inadequate to supply the horses of the department, and from a careful estimate there will be a deficiency of \$2,500.

In estimating for two new engine companies and one new truck company—one engine company to be placed in the northwest, in the neighborhood of Florida avenue, between Fourteenth street and Connecticut avenue; one in the northeastern section; and the truck company north of New York avenue, between New Jersey avenue and Seventh street NW—the primary object with all well-regulated fire departments is to act with dispatch. A minute gained in reaching and beginning the fight of subduing an incipient fire frequently saves thousands of dollars that

would be lost if the flames gained a headway. Dispatch in its fullest sense can not be obtained by the engines being placed so far apart as at present.

A very material increase in the efficiency and working power of the fire department will commend itself favorably to the consideration of every Commissioner, as well as of every citizen and property-owner. The department should be double its present size, but on account of the revenues of the district being only enough for present expenses I have only asked for an increase of three companies. I feel that I would be direct in my duty did I not continue each year to call your attention to the necessity of the wants of the department, until it will be able, in my judgment, to cope with fires that are liable to occur with the large buildings that have been constructed in recent years. In case of a large fire the entire department is called out, and should a second occur at the same time there would be no reserve to respond to the call.

In estimating for the exchange of one engine the same reasons exist as explained in my last report. I then asked that two engines be exchanged and you allowed one. There is in the department one old engine that could be profitably exchanged for a new improved engine, and I respectfully recommend that \$4,000 be appropriated for the purpose of effecting the exchange.

I have estimated for a new truck, to replace the old truck now in service at Truck B. The new Aerial trucks are far superior to the old style. The saving of time in subduing fires and saving life is often worth more than the price of a new truck.

I have on several occasions commented upon the scope and significance of the "Firemen's relief fund." In importance of the subject to which it relates, as well as the possibilities which it offers for wise and beneficial legislation, it takes rank before all other subjects. The present law is so defective that the payments to pensioners already on the roll exceed the income by \$12 per month, and as it was intended that the \$1 deducted from the monthly pay of each man should go towards creating a reserve fund for the benefit of any member who may be disabled, I called your attention during the last session of Congress to the need of some means by which it can practically be made a relief fund. You referred me to the Senate committee, and the answer of the chairman of the Subcommittee on Appropriations was that he favored an annual appropriation, and that if the estimates were presented to him approved by the Commissioners he did not think any trouble would be experienced in its adoption. I have therefore prepared the following figures for your guidance. I have included in this estimate 4 men that are now on the active list, but who have become so disabled from long service as to be of no use to the department.

Five disabled men, at \$600 per annum.....	\$3, 000
Three widows of firemen, at \$360 per annum.....	1, 080
Total	4, 080

Very respectfully,

JOSEPH PARRIS,
Chief Engineer.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

FIRE MARSHAL'S REPORT.

WASHINGTON, D. C., *July 1, 1891.*

DEAR SIR: I have the honor to transmit the following report of the transactions of this office for the fiscal year ended June 30, 1891:

During the year I visited and inspected the scenes of 191 fires for which alarms had been rung; also the scenes of 140 local fires for which no alarm was sounded. A list of causes for said fires, with the loss and insurance, will be found in this report. Also number of stores visited and samples of illuminating oil collected and inspected, and the number of buildings visited and inspected which were reported in an unsafe condition and in danger from cause of fire; also report on the grade of kerosene oil placed on this market and offered for sale.

Total loss by fire, \$165,803; insurance, \$84,993. I visited and inspected six different tenements which were reported to me as being in an unsafe condition and in danger from cause of fire from defective flues, stovepipes, and other causes, all of which have been attended to and put in a safe condition.

During the year I visited 484 stores where kerosene oil was kept on sale, and collected a sample of said oil from each place, which was duly tested and found to be of good quality.

I am happy to state that I did not find a sample below grade during the year. This shows that the regulations adopted by the honorable Commissioners in regard to petroleum have had the desired effect.

Following, number of fire and alarms from July 1, 1890, to June 30, 1891, with the causes and kind of buildings; also table showing the number of different causes; also material of which the buildings were constructed.

Most respectfully, your obedient servant,

WM. O. DREW,
Fire Marshal.

JOSEPH PARRIS, Esq.,
Chief Engineer Fire Department.

FIRE MARSHAL'S RECORD OF FIRES, DISTRICT OF COLUMBIA.

JULY, 1890.

No. of fire.	Date.	Hour.	Box.	Location.	Style of building.	How occupied.	Owner or occupant.	Origin of fire.	Dam- age.	Insur- ance.
1	1	A. M.	732	3220 K st. NW	Brick	Warehouse	W. H. Winship	Sparks from stack		
2	3	P. M.	19	105 to 115 E st. NW	Frame	Wood sheds	J. W. Haden and others	Firecrackers	\$130	
3	4		257	1339 S st. NW	do	Wood shed	Sarah Turner	do	75	
4	5	6.46	254	1809 T st. NW	do	Dwelling	Mark Young	Incendiary	100	\$100
5	5	2.44	62	27 H st. NW	do	Wood shed	Thos. Bellows	Hot ashes		
6	5	11.31	416	1200 Water st. SW	Brick	Grocery	C. W. Johnson	Unknown	2,000	1,800
7	6	3.34	73	1532 32d st. NW	Frame	Dwelling	W. Kinsinger	Spontaneous combustion	5	
8	7	3.34	151	1210 Pennsylvania ave. NW	do	Wood shed	S. Zannelli	Stove pipe	30	
9	7	6.02	137	1205 New York ave. NW	do	Dye house	A. and C. Lerch	Unknown	100	100
10	7	9.12	314	2112 Pennsylvania ave. NW	Brick	Dwelling	J. R. Francis	Incendiary	700	700
11	9	3.14	435	9th and H sts. SW	Frame	Lumber yard	J. D. Kitch	Boys playing with matches	1,600	
12	13	4.15	521	218th st. SE	do	Dwelling	Thos. Haven	Unknown	400	400
13	18	7.22	212	713 M st. NW	do	Wood shed	L. G. Warfield	Child playing with matches		
14	19	10.40	151	409 to 413 14th sts. NW	Frame and brick	Livery stable and wood sheds.	A. Nailor and others	Hot ashes	650	500
15	24	11.02	412	317 14th st. NW	Brick	Coach factory	Charles Walter	False alarm		
16	25	12.03	151	United States Treasury	Stone	Treasury	U. S. Government	Unknown	75,000	9,000
17	28	10.35	156	1015 11th st. NW	Brick	Dwelling	M. Haggerty	Electric light wire		
18	29	1.36	137	412 8th st. SE	do	Furniture store	H. L. Trive	Explosion gasoline stove	40	
19	29	2.18	518	533 5th st. SE	do	Stable	Wm. F. Henry	Unknown	150	150
20	30	2.48	56		Frame			Incendiary	150	150
									81,130	12,900

Local or silent alarms.

1	2	11.07	7.42	408 East Capitol st. NE	Frame	Dwelling	Jas. A. Clark	Explosion of gasoline stove.	10	10
2	3		8.46	615 4 1/2 st. SW	Brick	do	O. A. Codrick	Chimney		
3	4			1st and H sts. NW	Brick	Drug store	Williams	Bonfire		
4	6	3.05		No. 27 H st. NW	do	Dwelling	M. McCabe	False alarm		
5	6	3.56		27th and I sts. NW	Frame	Limekiln	Cammack & Co.	Hot ashes		
6	6	3.56		6th and K sts. NW	Brick	Wood and coal yard.	G. W. Merrill	Accident	5	
7	10	2.12		17th and M sts. NW	Frame	Dwelling	S. R. Smith	Sparks from stack	50	50
8	12	3.02		939 4th st. NW	do	Dwelling	L. Gochler	Upsetting lamp		
9	14	12.09		243 1/2 E st. SW	do	Restaurant	J. B. Crown	Explosion of gasoline stove.		
10	15	1.44			do	Dwelling		Chimney		

JULY, 1890—Continued.

Local or silent alarms—Continued.

No. of fire.	Date.	Hour.		Box.	Location.	Style of building.	How occupied.	Owner or occupant.	Origin of fire.	Dam- age.	Insur- ance.
11	16	A. M.	P. M.		413 G st. NW	Brick	Dwelling	C. S. Clark	Explosion of gasoline stove.		
12	19		8.02		633 Pennsylvania ave. SE.	do	do	Jos. Torrens	Child playing with matches.		
13	19		10.38		Same as for box 151.						
14	20		3.50		G bet. 17th and 18th sts. NW.	Brick	Club house	Columbia Athletic Club Co.	Electric light wire	\$15	
										80	\$60

AUGUST, 1890.

1	1			412	207 7th st. SW	Brick	Engine room	Newton Brewer	Carelessness		
2	5		5.22	67	400 H st. NE	do	Grocery	William Brahler	Accident from gasoline*		
3	9		1.50	518	710 G st. SE	Frame	Stable	Mary Morgan	Lamp explosion	40	
4	10	11.09	8.56	127	737 7th st. NW	Brick	Dwelling	Charles Kramer	Explosion of gasoline stove	225	35
5	11	5.30		425	223 D st. SW	Frame	Stable	Edward Quirk	Unknown	70	40
6	12		4.06	412	415 5th st. SW	do	Dwelling	John Horth	Accident	50	50
7	13		7.42	57	505 Virginia ave. SE	do	Grocery	H. Missikline	Fireworks	50	
8	16		1.08	123	621 F st. NW	Brick	Carpenter shop	J. C. Pinple	Unknown	50	
9	17	10.39		321	607 23d st. NW	do	Dwelling	A. Bufoucher	Explosion of gasoline stove		
10	23	10.30		312	717 22d st. NW	Frame	do	D. H. Shryrock	Defective flue		
11	25	10.40		123	613 F st. NW	Brick	Tailor shop	N. Horn	Explosion of gasoline stove	2,200	2,200
12	28	1.01		26	516 N st. NW	do	Dwelling	H. Thurston	do	40	20
13	28	1.43	9.06	127	629 H st. NW	do	do	H. Strausburg	Defective gas-pipe	25	
14	29			518	534 8th st. SE	Frame	Tin and stove store	M. B. Flynn	Tinners' pot		
15	29		6.56	512		Brick	Restaurant		False alarm	40	40
16	30	3.05		15	232 2d st. NW			A. C. Walter	Incendiary		
										2,740	2,385

* A man badly burned.

† Mrs. Thurston badly burned.

Local or silent alarms.

1	8	9.46	.....	.....	.....	.....	.....	.....
2	13	.....	11.47	.....	Brick	Hospital	.....	.....
3	16	.....	.....	.....	do	Dwelling	.....	.....
4	16	.....	4.09	.....	do	Dining saloon	Samuel Clark	.....
5	18	.....	10.20	.....	do	.....	John P. Lyons	10
6	25	.....	10.33	.....	Brick	Dining saloon	M. Sparks	.....
7	25	.....	11.00	.....	.....	.....	.....	.....
		.....	12.01	.....	.....	.....	.....	.....
		.....	.....	.....	.....	.....	.....	60

NOVEMBER, 1890.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
39	36	518	241	67	253	36	423	58	58	247	314	31	61	58	14	135
.....	6.13	.....	5.43	5.38	.....	8.29	.....	5.59	1.56	.....	.....	8.30	.....	5.31	.....	5.40
9.14	.....	12.16	.....	.....	1.42	.....	12.45	.....	.....	9.32	5.37	.....	12.29	.....	12.06	.....
1723 Rhode Island ave. NW.	618 19th st. NW	721 7th st. SE	1524 Kingman Place. NW	732 2d st. NE	1541 T st. NW	500 20th st. NW	1002 D st. SW	Baltimore and Potomac Rail- road freight yard.	Same as preceding fire	1406 16th st. NW	2013 H st. NW	19th and E sts. NW	216-218 Delaware ave. NE	1138 Half st. SE	308 F st. NW	1004 H st. NW
Brick	do	Frame	Brick	Frame	Brick	Frame	do	do	Brick	do	do	Frame	do	Brick	do	do
Dwelling	Widows' home	Dwelling	do	do	do	Stable	Kindling-wood mill	Lime shed	Dwelling	do	Stable	Dwellings	Dwelling	Pension Agency	Dwelling	Dwelling
R. L. Gibson	Lenthal Home Asso	E. Sweeney	J. R. Cole	M. J. Healy	V. Boucher	Battle Minor	S. C. Carter	Baltimore and Poto- mac R. R. Co.	A. L. Case	Fred Gheen	F. M. Draney	Henry Mason	Nancy Stone	U. S. Government	N. R. Allen	.....
Accident	Lamp explosion	Chimney	Gas jet	Unknown	Rats	Unknown	Furnace	Slaking lime	Rekindling	Chimney	Defective furnace	Smoking pipe	Stove	Chimney	Defective hearth	Accident
.....	40	.....	75	30	15	15	100	300	.....	100	1,500	200	.....	100	100	2,345

NOVEMBER, 1890—Continued.

Local or silent alarms.

No. of fire.	Date.	Hour.		Box.	Location.	Style of building.	How occupied.	Owner or occupant.	Origin of fire.	Dam- age.	Insur- ance.
1	2	A. M.	P. M.		1011 3d st. NW	Frame	Dwelling	L. Stewart	Defective flue.	\$5	\$5
2	3		6. 31		6th and Water sts. SW	do	Kindling-wood mill.	G. L. Sheriff	Chimney		
3	6		4. 06		2018 12th st. NW	do	Woodshed	J. L. Hines	Hot ashes		
4	6		9. 40		2025 L. St., NW	do	Dwelling	Eliza Meyers	Carelessness with matches	30	
5	6		9. 50		Same as preceding fire.						
6	8		6. 53						False alarm.		
7	9		10. 50		1st st. and Massachusetts ave. NW	Frame	Locomotive-car roof.	Baltimore and Ohio R. Co.	Sparks from stack.		
8	9		6. 56		730 5th st. NW	Brick	Dwelling	H. Behrens	Upsetting lamp.		
9	11		4. 22		909 F st. NW	do	Confectionary	W. E. Buckingham	Leaky gas pipe		
10	14		4. 44		1773 Massachusetts ave NW	do	Dwelling	Perry Hawes	Chimney		
11	15		4. 59		605 7th st. NW	do	Paper hanger.	Spelshouse	Hot ashes	25	25
12	24		11. 42		1008 4th st. NW	Frame	Dwelling	Susan Wood	Unknown	25	25
13	25				1222 Connecticut ave. NW	Brick	do	F. P. B. Sands	Carelessness.		
14	27		12. 20		Same as for box 61						
15	27		5. 29		Same as for box 314						
16	27		6. 01						False alarm.		
17	28		11. 58		Same as for box 14						
18	29		7. 37		Same as for box 135						
										85	55

DECEMBER, 1890.

1	1	5. 11		212	1122 7th st. NW	Brick	Billiard room.	A. F. Moran	Cigar stump.	50	
2	2	10. 09		213	1542 8th st. NW	Frame	Dwelling	Anne Cole	Chimney		
3	4	7. 09		148	1312 Massachusetts ave. NW	Brick	Academy	Sisters of the Holy Cross.	Gas jet	5	5
4	4		5. 05	147					False alarm.		
5	4		6. 51	215	No. 1 Shepherd's alley	Brick	Dwelling	Mary Loumax	Lamp explosion	10	
6	5		2. 14	63	46 Fenton st. NE	do	Mattress factory.	E. Casson.	Unknown	300	150
7	5		2. 17	21	Same as for box 63						
8	6		2. 32	524	E, between 13th and 14th sts. SE.	Frame	Brewery.	Henry Raby	Sparks from stack.	10	10
9	7	1. 55		129	403 7th st. NW	Brick	Toy and variety store,	Cris. Ruppert	Defective flue	22, 930	22, 930

10	8	11.36	634	11th, between B and C sts. NE.	Frame	Dwelling	John Borden	Chimney	.....
11	9	.....	524	407-409 11th st. SE.	do.	Woodsheds	S. Clark, W. C. Jones.	Hot ashes	.....
12	12	7.58	314	2001 I st. NW.	Brick	Dwelling	A. T. Morgan	Chimney	15
13	14	6.24	38	1911 K st. NW.	Frame	do	George Curtis	Stove	25
14	15	4.04	247	1733 Q st. NW.	Brick	do	D. F. Hamlink	Accident	50
15	16	4.57	731	Alley between 21st and 32d and K and M sts. NW.	Frame	do	Essex estate	Incendiary	100
16	19	.....	134	1014 F st. NW.	Brick	Drug store	E. P. Mertz	Furnace	625
17	20	11.54	135	617 11th st. NW.	do	Packing house	Woodward & Lothrop.	Defective hearth	25
18	20	2.40	138	.....	Brick	Dwelling	E. Goetzlager	False alarm	.....
19	20	6.16	216	1229 9th st. NW.	Brick	Dwelling	.....	Child playing with matches.	5
20	23	11.05	634	.....	Frame	Woodshed	S. Johnson	False alarm	.....
21	24	12.37	13	216 B st. NW.	do	Dwelling	J. J. Coulter	Hot ashes	.....
22	24	7.57	128	216 H st. NW.	Brick	Gents' furnishing store.	E. A. Stiebel	Stovepipe	100
23	25	5.37	17	355 Pennsylvania ave. NW.	do	Dwelling	.....	Unknown	3,300
24	25	1.05	245	1317 D st. NW.	do	Dwelling	M. McSweeney	Explosion of gasoline stove	.....
24	25	7.11	315	1106 22d st. NW.	Frame	Woodshed	B. Richards.	Accident	10
26	28	6.54	214	1826, 1828, 1828 1/2 Vermont ave. NW.	do	Dwellings	Dr. J. M. Toner	Incendiary	600
27	28	11.47	318	1716 N st. NW.	Brick	Dwelling	C. M. Wood	Chimney	.....
									28, 160
									27, 095

Local, or silent alarms.

1	3	9.31	.....	6th and Water sts. SW.	Frame	Steamboat	Inland Seaboart Coast- ing Co.	Overheated stack	50
2	4	8.34	.....	318 9th st. NW.	Brick	Bookbindery	Stocket & Co	Explosion of gasoline stove	10
3	7	3.12	.....	603 4 1/2 st. SW.	do	Dwelling	Samuel Jones	Defective flue	10
4	8	5.10	.....	1723 H st. NW.	do	do	S. T. Howard	Gas jet	10
5	12	7.05	.....	213 Nichols Place NE.	do	Dwelling	T. B. Means	Chimney	.....
6	12	1.55	.....	2225 7th st. NW.	Frame	Storehouse	Brightwood R. R. Co.	Unknown	50
7	12	5.57	.....	.....	Frame	Fence	.....	False alarm	.....
8	13	10.58	.....	9th and S sts. NW.	Frame	Committee rooms	H. Willard.	Accident	.....
9	15	6.01	.....	32 B st. NE.	Brick	Dwelling	U. S. Senate	Unknown	20
10	14	9.34	.....	337 F st. SW.	Frame	Dwelling	Susan Thomas	Stove	.....
11	16	9.02	.....	27th and Olive sts. NW.	Frame	Dwelling	.....	Burning brush	.....
12	17	9.15	.....	521 7th st. SW.	Frame	Bridge	M. E. Beach	Unknown	75
13	17	6.22	.....	Pennsylvania ave. and 16th st. SE.	do	.....	U. S. Government	Bursting gas main	.....
14	20	10.09	.....	Same as for box 125	.....	.....	.....	False alarm	.....
15	22	10.54	.....	.....	.....	.....	.....	.....	.....
16	24	7.53	.....	Same as for box 128	.....	.....	.....	.....	.....
17	25	3.41	.....	1530 I st. NW.	Brick	Dwelling	Mrs. Plummer	Defective furnace	.....
18	26	5.26	.....	1731 K st. NW.	Frame	do	P. R. Smoot	Chimney	.....

Local or silent alarms.

1	1	4.51	2119 16th st. NW	Frame	Dwelling	W. J. Spencer	Lamp explosion	75	75
2	3	6.35	706 11th st. SE.	do	Bakery	J. H. Hudson	Defective oven	15	15
3	3	1.42	1417 T st. NW	Brick	Dwelling	T. H. Morris	Child playing with matches	25	25
4	3	3.59	1207 R st. NW	Frame	do	C. E. Harvey	Stovepipe	15	15
5	3		Same as for box 713						
								130	105

FEBRUARY, 1891.

1	2	8.46	1352 Q st. NW	Brick	Dwelling	Wm. Dickson	Explosion of gasoline stove	25	10
2	4	12.32	Washington almshouse	do	Barn	D. C. government	Incendiary	1,200	1,000
3	7	25	510 K st. NW	Frame	Feed store	Roth & Moore	do	1,000	1,000
4	8	427	1024 6th st. SW	do	Restaurant	J. C. Knight	Lamp explosion		
5	11	131	615 7th st. NW	Brick	Printing office	Wright & Coleman	Waste paper		
6	12	16	B. and P. depot	do	Oil house	Baltimore and Potomac R. R. Co.	Torch		
7	13	253	1616 S st. NW	do	Dwelling	Theo. W. Noyes	Gas jet		
8	14	137	945 K st. NW	do	do	Mrs. James Stacey	Unknown	100	50
9	15	148	1424 L st. NW	do	do	Wm. Nelson	Defective flue		
10	16	731	30th and K sts. NW	Frame	Planing mill	Wheatley Bros	Stove		
11	25	129	908 D st. NW	Brick	Dwelling	L. A. Roginsky	Unknown	187	187
12	25	143	741 13th st. NW	do	do	G. M. Crown	Smoky furnace	50	50
13	26	238	1309 Riggs st. NW	do	do	J. H. McCreary	Accident		
14	27	135		do	do		False alarm		
								2,562	1,297

Local or silent alarms.

1	3	7.56	29th and K sts. NW	Frame	Wood yard	Wm. King & Son	Accident		
2	5	9.25	1108 D st. NW	Brick	Theater	Roop & Nopper	Furnace pipe		
3	11	8.06	3d and M sts. NE	Frame	Stable	P. H. Kelly	Accident	20	
4	14	4.17	8 Cox's alley NW	do	Dwelling	A. Zvereiga	Child playing with matches	20	
5	14	7.26	932 Florida ave. NW	do	Wood shed	J. A. Clark	Unknown		
6	16	6.06					False alarm		
7	16	8.46	309 K st. NW	Brick	Dwelling	James Moore	Chimney		
8	18	3.59	17th st. wharf NW	Frame	Sand boat	J. B. Lord	Unknown		
9	19	8.06	3221 Q st. NW	do	Dwelling	S. A. Brown	Sparks from chimney		

134 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

MAY, 1891.

No. of fire.	Date.	Hour.		Box.	Location.	Style of building.	How occupied.	Owner or occupant.	Origin of fire.	Dam- age.	Insur- ance.
1	2	A. M.	P. M.	136	1119 12th st. NW.	Frame	Woodshed	Wm. H. Dill	Child playing with matches	\$150	.....
2	4	.....	6.49	21	1006 1st st. NW.	do	Dwelling	Samuel Cooper	Chimney	.....	.....
3	5	.....	5.59	436	311 10th st. SW.	do	do	S. Carter	do	.....	.....
4	6	2.10	.....	67	Alley between 3d and 4th and H and I sts. NE.	do	Stables	John Vanderbilt and others.	Incendiary	500	\$75
5	10	1.35	.....	413	713 F st. SW.	do	Provision store	R. L. Cramer	Unknown	.....	.....
6	15	11.19	.....	24	1st and R st. NW.	Brick	Shanty	Thos. Waggoner	Incendiary	.....	.....
7	16	.....	11.58	16	477 Pennsylvania ave. NW.	do	Drug store	Samuel T. Stott	Accident	.....	.....
8	19	4.09	.....	721	3244 and 3246 M st. NW.	Frame	Dwelling	Simmons & Gross	Spontaneous combustion	500	400
9	20	12.23	.....	38	1002 and 1004 20th st. NW.	do	do	C. Sprigs and L. Halstead.	Incendiary	1,000	1,000
10	20	12.35	.....	36	Alley between 18th and 19th and D and E sts. NW.	do	do	B. Fleet and A. Jones	do	*1,500	.....
11	28	.....	8.22	214	1845 7th st. NW.	Brick	Paint store	H. F. Houck	Unknown	3,650	1,475

* A. Jones died from suffocation.

Local or silent alarms.

1	1	11.27	.....	.....	Country	Frame	Dwelling	Mary Owens	Burning brush	.....	.....
2	2	.....	8.53	.....	439 10th st. SW.	do	Stable	J. B. Johnson	Explosion of gasoline stove	(†) 10	10
3	9	.....	10.30	.....	137 F st. SW.	.....	.....	.....	Incendiary	.....	.....
4	12	.....	6.30	.....	.....	.....	.....	.....	False alarm	.....	.....
5	13	8.40	.....	.....	1375 Ohio ave., NW.	Frame	Dwelling	S. Zanelli	Lamp explosion	25	.....
6	14	7.58	.....	.....	1206 Ward Place NW.	Brick	do	R. Dandridge	Unknown	25	.....
7	17	.....	1.43	.....	.....	.....	.....	.....	False alarm	.....	.....
8	19	.....	10.20	.....	.....	.....	.....	.....	Light in county	.....	.....
9	20	.....	.....	.....	.....	.....	.....	.....	False alarm	.....	.....
10	23	.....	10.31	.....	321 13th st. NW.	Brick	Dwelling	Lucy Lewis	Unknown	40	20
11	24	.....	8.20	.....	1700 H st. NW.	do	Clubhouse	Metropolitan Club	Chimney	.....	.....
12	26	.....	6.52	.....	3218 M st. NW.	do	Lunch room	Wm. Payne	Explosion gasoline stove	50	50
13	26	.....	9.45	.....	141 F st. SW.	do	Grocery	M. Wilson	Lamp explosion	5	.....
14	30	.....	9.02	.....	805 11th st. NW.	do	Dwelling	C. M. Small	Gas jet	5	.....
15	31	9.58	.....	.....	.....	.....	.....	.....	False alarm	.....	.....
										160	80

† Mrs. Owens burned to death.

JUNE, 1891.

[illegible]

Local or silent alarms.

[illegible]

A.—Statement of the number of fires, loss, and insurance for the year ending June 30, 1891.

Month.	Fires for which alarms were given.			Local alarms.		
	No. of fires.	Loss.	Insur- ance.	No. of fires.	Loss.	Insur- ance.
1890.						
July.....	20	\$31, 130	\$12, 900	14	\$80	\$60
August.....	16	2, 740	2, 385	12	10, 185	6, 120
September.....	12	1, 750	1, 310	12	510	360
October.....	16	3, 595	3, 240	7	60	.....
November.....	17	2, 560	2, 345	18	85	55
December.....	27	28, 160	27, 095	22	215	215
1891.						
January.....	18	20, 520	19, 910	5	130	105
February.....	14	2, 562	1, 297	13	40	.....
March.....	12	2, 491	2, 486	7	.....	.....
April.....	13	1, 200	910	12	325	275
May.....	11	3, 650	1, 475	15	160	80
June.....	15	3, 610	2, 370	7	45	.....
Total.....	191	153, 968	77, 723	144	11, 835	7, 270

B.—Record showing the cause of fires and alarms for the year ending June 30, 1891.

Cause.	Number.	Cause.	Number.
Sparks from smokestack.....	7	Defective street lamp.....	1
Fireworks.....	4	Defective hearth.....	3
Incendiary.....	23	Grease on stove.....	2
Hot ashes.....	8	Cigar stump.....	3
Unknown.....	42	Stove.....	10
Spontaneous combustion.....	5	Smoking pipe.....	4
Stovepipe.....	6	Tar kettle.....	2
Children playing with matches.....	17	Defective furnace.....	3
False alarm.....	33	Gas jet.....	8
Electric-light wire.....	5	Rats.....	1
Explosion of gasoline stove.....	22	Furnace.....	2
Chimney.....	35	Slacking lime.....	1
Bonfire.....	5	Rekindling.....	1
Accident.....	19	Overheated stack.....	1
Upsetting lamp.....	2	Escaping steam.....	1
Carelessness.....	6	Defective bakeoven.....	1
Lamp explosion.....	8	Waste paper.....	1
Defective flue.....	13	Torch.....	1
Defective gas pipe.....	3	Test alarm.....	1
Soldering pot.....	1	Boys smoking cigarettes.....	1
Chemicals.....	1	Building fire in hollow tree.....	1
Smoky range.....	2		

1890—Continued.

C.—Kind of buildings where fires originated.

Buildings.	Frame.	Brick.	Buildings.	Frame.	Brick.
Dwellings.....	58	87	Shoe store.....		1
Stables.....	13	4	Bridge.....	1	
Woodsheds.....	23		Jeweler's store.....		1
Club houses.....		2	Mattress factories.....		11
Lunch rooms.....		3	Brewery.....	1	
Groceries.....	3	5	Toy and variety store.....		1
Offices.....		2	Packing house.....		1
Cigar stores.....	2	1	Academy.....		1
Restaurants.....	2	4	Billiard room.....		1
Lumber yards.....	2		Committee room.....		1
Storehouses.....	3	4	Bookbindery.....		1
Provision store.....	1		Gents furnishing store.....		1
Shanty.....	1		Locomotive cab.....	1	
Drug stores.....		3	Confectionery.....		1
Paint store.....		1	Paper-hanger.....		1
Tar shed.....	1		Lime shed.....	1	
Crockery store.....		1	Pension agency.....		1
Paint works.....	1		Hospital.....		1
Sawmills.....	3		Builders' material.....		1
Dry-goods store.....		1	Tin and stove stores.....	1	1
Market house.....		1	Brick shed.....	1	
Photograph galleries.....		2	Bank.....		1
Wood and coal offices.....	1	1	Engine room.....		1
Clothing store.....		1	Carpenter shop.....		1
Wood yards.....	2		Tailor shop.....		1
Theaters.....		2	Lime kiln.....	1	
Boats.....	3		Dye house.....	1	
Bakery.....	1		Livery stable.....		1
Barn.....		1	Coach factory.....		1
Feed store.....	1				Stone.
Printing offices.....		11	U. S. Treasury.....		1
Oil house.....		1			Brick.
Planing mills.....	1	1	Furniture store.....		1

H.

REPORT OF SUPERINTENDENT TELEGRAPH AND TELEPHONE SERVICE.

OFFICE TELEGRAPH AND TELEPHONE SERVICE,
Washington, D. C., August 1, 1891.

SIRS: I have the honor to submit the twenty-seventh annual report of the telegraph and telephone service of the District of Columbia for the fiscal year ending June 30, 1891.

This service embraces the fire-alarm telegraph covering Washington and Georgetown, also the police patrol telegraph and the entire telephone service connected with the District government.

The fire-alarm telegraph consists in part of seven signal and four alarm circuits—all metallic. These eleven circuits are connected with an automatic repeater and other necessary instruments at the central office, and constitute what is known as the "Gamewell" system. When this plant was constructed in 1875 (sixteen years ago) it embraced all the really valuable devices then known to this branch of telegraphic art; but since that time many valuable improvements have been introduced which ought to be incorporated in our own. Most of our instruments are good, but the lines are not in good condition and can not be put in proper condition without expending a large sum of money, and since no adequate appropriation has been made for this purpose, it has not been possible to keep them up to a proper standard.

There are at present 150 alarm boxes distributed on the seven signal circuits—just twice the number we started with in 1875, but while the boxes have doubled, the circuits have not been increased, thus greatly overloading nearly every circuit with boxes. No. 1 circuit has 25 boxes, No. 2 has 26, No. 3 has 14, No. 4 has 20, No. 5 has 19, No. 6 has 23, No. 7 has 23; total, 150. Eight or 10 boxes are as many as ought to be placed on a single signal circuit for fire-alarm purposes, to insure best efficiency.

On the four alarm circuits there are distributed the gongs and bells upon which are sounded the alarms for fire and the hours of the day. No. 1 circuit has 3 gongs and 1 bell; No. 2 has 5 gongs and 1 bell; No. 3 has 3 gongs and 1 bell; No. 4 has 7 gongs and 1 bell; total, 19 gongs and 4 bells. These, like the signal circuits, are overloaded with instruments. The circuits, however, can not be increased without obtaining new repeaters with larger capacity. The facts are the city has largely outgrown the fire-alarm telegraph.

In my report last year, as well as in several special reports on the same subject, I called attention to the great need of extending the fire-alarm telegraph, as well as the bad condition of the lines. The much needed renewal of the lines has been held in abeyance, awaiting the report and adoption thereof of some plan to be formulated by an electrical commission for putting all wires within city limits underground. For the purposes of this report I will assume that said commission will

report a good plan and that it will be adopted, and that Congress will provide for putting the plan in execution. Hence I venture the following recommendation: Increase the number of fire-alarm boxes, 250, making the total 400. Distribute these 400 boxes as nearly equal as practical over 40 metallic signal circuits. Increase the alarm circuits to 10 for connecting with the necessary number of fire companies. Provide for 4 separate bell circuits, which shall connect only with such number of church bells as may be requisite for giving the "time signals" to every section of the two cities. These signals to be struck through the 4 circuit manual repeater now in use. Procure for the central office four 15-circuit automatic repeaters and one 15-circuit manual repeater, together with the necessary switch-boards and other central office outfits to meet the enlarged capacity of such plant. I feel justified in urging the necessity for this improvement. The growth of the city demands it, and unless some such plan is adopted it will be literally impossible to maintain an efficient fire alarm; and without an efficient fire alarm there can not be any great degree of efficiency in the fire department.

Whether the wires are to be put underground or not, the lines must be rebuilt very soon; it is absolutely hazardous to further postpone their reconstruction. Nearly all the overhead part of the fire-alarm wires were put up sixteen years ago and were supported in part on housetop fastenings, and the remainder on small poles which are now in an advanced state of decay. Of course the lines are in a very bad condition, and I state the case mildly when I inform you that nearly all the wires of the department are in an unsatisfactory condition. The superintendent has been and is quite helpless in the matter; but having frequently called attention to the subject, he could only wait and hope for relief.

If the wires are to be put underground the work should be commenced as soon as possible, and even should that work be undertaken as early as next spring it will become necessary to put in many new poles along the old existing lines. I called very earnest attention to this necessity in my last annual report and in a subsequent communication on the same subject, but Congress made no provision for such repairs.

Should ample provision be made for placing all the wires underground, and should the work be commenced in the near future, even then it will be necessary to secure an appropriation for keeping the present lines in reasonably good condition while the cables are being laid. This, in my judgment, can not be done without an expenditure of at least \$7,500 for new poles. Of course the overhead system must be maintained until the underground shall have been fully completed.

TELEPHONE SERVICE.

There are 42 telephone earth-return circuits (exclusive of the patrol) on which are distributed 62 sets of telephones for the transaction of business connected with the various departments of the District government, including a portion of the public schools in Washington and Georgetown.

In addition to the telephone service above, there are in use by various officers and institutions under the control of the Commissioners 19 sets of telephones on the lines and under the control of the Chesapeake and Potomac Telephone Company. Independently of the police patrol service, this department uses and pays rent for 81 sets of telephones.

Those on the exchange are used at the following places: Residences of Commissioners Douglass, Col. Robert, Capt. Rossell, Capt. Lusk, Secretary Tindall, Coroner Patterson, Superintendent of Sewers McComb. In the District building 4, and 1 each at sand-yard stables, office of district attorney, School Trustee Thayer, health department, Washington Asylum, police court, Franklin school, and telephone room. These are at an annual rental of \$50 each, equal to \$950 a year.

The 62 sets on the wires belonging to this department are located as follows: The fire-alarm office, office chief of fire department, residences of superintendent telegraph and telephone service, Repairman Parker, Fire Marshal Drew; one each at the 10 fire companies; in the District building, 3; the two pump houses 1 each; Water Tapper Fitzgerald, residence of health officer, the health department, District pound, St. Elizabeth Asylum, Washington Asylum and Dispensary, each 1; Emergency Hospital, police court, Maj. Moore, police headquarters, 4; residences of Police Surgeons Henderson, Kleinschmidt, Strickler, and McKim.

At the following schools each 1: Abbott, Blair, Curtis, Cook, Dennison, Franklin, Force, Gales, Garnett, Grant, High, Henry, Industrial, Jefferson, Lincoln, Lovejoy, Maury, Peabody, Randall, Sumner, Seaton, Webster, Wormley, and Wallach. For these an annual rental of \$15 is paid for each set. In addition there is paid a gross sum of \$300 for general exchange business.

POLICE PATROL SERVICE.

The police patrol and telephone system now covers all of Washington and Georgetown, and was erected and put in operation in the various precincts as follows: In the first, October 1, 1884; in the sixth, March 16, 1885; in the fourth, November 1, 1886; in the second, October 26, 1887; in the third, November 1, 1888; in the ninth, May 1, 1889; in the seventh, October 1, 1890; in the fifth, June 24, 1891; in the eighth, June 24, 1891.

The first precinct has 13 street stations, the second 16, the third 16, the fourth 16, the fifth 14, the sixth 13, the seventh 14, the eighth 10, the ninth 14; total, 126 street stations.

TELEPHONE REPORTING STATIONS.

The substation at Anacostia has a telephone connected with the fifth precinct station house. In the seventh precinct the substation, at Tennyallytown, is connected by telephone with the station in Georgetown. In the eighth precinct there are 6 telephone reporting stations in the county, all connected with the U street station house, one each at Ivy City, Brookland, Takoma Park, Brightwood, Seventh street, and Rock Creek Church road crossing, and Mount Pleasant.

In conducting the police telegraph and telephone patrol system, this department used during the entire year 116 sets of telephones in the seven precincts which had the system at the beginning of the fiscal year, and during the last ten days of the year 34 additional sets in the fifth and eighth precincts, closing the year with 152 sets.

TELEPHONIC RECAPITULATION.

At the close of the fiscal year this department was using 19 sets of exchange telephones at an annual rental of \$50 each set; on its own wires 214 sets, at \$15 each per set; total, 233 sets.

RENEWALS IN PART.

In the early part of the year, covered by this report, 13 new signal boxes were purchased from the Gamewell Fire-Alarm Company of New York, and put in place of the old boxes which were worn out from long and constant use in the first precinct. These new boxes work with a punching register in the central station (which was obtained a few months previous) and is very satisfactory. The punching register is less complicated than either the inking or chemical registers, and for that reason it is more reliable.

In the second, third, fourth, sixth, and ninth precincts chemical registers are in use, and of the kind known as the "Chicago" or Gamewell system. The seventh (Georgetown) precinct has the municipal system with an inking register. The fifth and eighth precincts each have the "improved" Gamewell system, with the inking register.

The instruments in both the fourth and ninth precincts are so nearly worn out as to require entire renewal as soon as possible, having performed good work for a long time.

The instruments in the ninth precinct are those formerly in use in the sixth, and indeed five of the street stations are a part of the original twenty which were put up in the first precinct in 1884. The entire number of old call boxes, as well as the central office instruments, in both the fourth and ninth precincts are about worn out and should be renewed. They have done good work, but can not do it much longer. Estimate for renewal is herewith presented. A suitable desk, switch-board, etc., for the station-house outfit (first precinct) is also a necessity and could be provided for from the funds for the support of the department, as estimated.

ADDITIONAL HELP NEEDED.

The large increase in the telegraph and telephone service during the past two years renders it necessary to increase the help to take care of both lines and batteries. Up to the present time one of the laborers has taken the entire care of the line batteries, of the fire-alarm telegraph at headquarters, and the patrol batteries at the several station houses, but since the introduction of the system into all the precincts (nine) the work is greater than one man can properly perform. I therefore recommend that a battery man be provided for at a salary of \$600 per annum.

Within a little more than a year's time about 70 miles additional overhead wire has been added to the lines of this department, and some of it extending to Takoma, Ivy City, and Brookland. This great increase in the lines carries with it the necessity for one additional repairman at the same rate of salary paid the other repairmen. I also recommend that such provision be made.

During the last two months of the fiscal year the patrol system was extended to the fifth and eighth police precincts, but as the cost of construction was not paid from the revenues of this department it forms no part of this report, except a passing notice.

It may be interesting to note, as a matter of history, that since the introduction of the fire-alarm telegraph in this city (Washington) in the autumn of 1864, up to June 30, 1891, 4,651 alarms have been given over the wires for the fires which have occurred.

EXPENDITURES DURING THE YEAR.

Telephone rents and tolls	\$3,953.10
Battery supplies	1,455.10
New batteries	320.00
Office rent	200.00
New wire	262.18
New instruments	714.15
Forage	161.80
Paper and chemicals for patrol registers	152.15
Aggregate of small miscellaneous items	293.22
Gas light	99.25
Trimming trees to prevent obstruction of the wires	96.37
Fuel	83.18
Ice	47.93
Repairing patrol instruments	45.35
Blacksmith work	34.25
Washing	24.00
Repairing wagon and cart	22.75
Total expense, exclusive of salaries	7,964.78
Total amount of salaries paid during the year	10,700.00
Total sum paid for all purposes during the year	18,664.78

The item for new instruments in the foregoing statement is made up in the purchase of 2 fire-alarm boxes, 13 patrol boxes for the first precinct, 4 magneto call boxes, 3 vibrating bells, and 1 push button.

ALARMS FOR FIRES DURING THE YEAR.

There were 335 alarms pertaining to fires during the year which were transmitted through this office to the fire department, being an increase of 17 alarms over the preceding year. There were 191 first alarms, 3 general alarms, 3 second alarms, and 144 local alarms. The local alarms were, in all cases, communicated by telephone to the nearest fire company, without striking an alarm, by the telegraph, and usually given in response to telephone message coming from private houses in the vicinity, "but where no attempt had been made to give an alarm through the fire telegraph." This practice has been in vogue several years and proves the best possible way to work this class of alarms.

There was one alarm from each of the following boxes : 13, 14, 17, 19, 125, 128, 131, 134, 136, 138, 146, 154, 156, 157, 23, 25, 26, 238, 239, 241, 246, 251, 257, 31, 32, 37, 312, 318, 326, 328, 41, 423, 425, 426, 427, 435, 438, 54, 56, 512, 514, 516, 521, 526, 527, 531, 61, 62, 63, 64, 69, 621, 623, 628, 631, 632, 71, 72, 73, 732; two each, 12, 15, 16, 143, 147, 24, 213, 215, 216, 243, 245, 254, 315, 321, 45, 436, 57, 634, 713, 721, 731; three each, 123, 129, 148, 152, 21, 212, 217, 247, 253, 36, 38, 314, 319, 412, 413, 58, 524, 67; four each, 127, 135, 151, 214, 39, 518; five from 416, and six from 137.

There were no alarms from boxes 18, 121, 124, 126, 132, 142, 145, 149, 153, 141, 162, 27, 28, 218, 219, 236, 237, 248, 249, 256, 34, 35, 324, 325, 327, 42, 43, 46, 47, 48, 415, 417, 421, 431, 432, 51, 52, 53, 513, 517, 523, 528, 532, 65, 68, 612, 613, 614, 625, 627, 76, 712, 714, and 735.

BETWEEN WHAT HOURS THE FIRES OCCURRED.

The records show that 60 alarms were struck between midnight and 6 o'clock a. m.; 76 alarms between 6 o'clock a. m. and 12 o'clock m.; 93 alarms between 12 o'clock noon and 6 o'clock p. m.; and 106 alarms between 6 o'clock p. m. and midnight.

NUMBER OF FIRES EACH MONTH.

There were 335 alarms during the year, as follows:

July.....	34
August.....	28
September.....	24
October.....	23
November.....	35
December.....	49
January.....	23
February.....	27
March.....	19
April.....	25
May.....	26
June.....	22

HOW THE ALARMS WERE GIVEN.

One hundred and eighty-one came direct through the fire-alarm boxes, and 10 by police telephone. The 144 local alarms were received and transmitted by telephone.

TIME SPENT EXTINGUISHING FIRES.

In response to alarms during the year, a portion of the fire companies were absent from quarters in the work of subduing fires (allowing eight hours for a days' work) thirty-one days two hours and thirty-two minutes, divided by months as follows:

	Hrs.	M.		Hrs.	M.
July.....	33		January.....	20	35
August.....	15	32	February.....	20	7
September.....	14	45	March.....	11	46
October.....	15	16	April.....	18	30
November.....	23	38	May.....	18	15
December.....	43	33	June.....	15	35

TELEPHONE MESSAGES.

There were sent and received during the year on police business 142,190 messages, which were recorded in the books of this department, as follows:

July.....	12, 935
August.....	12, 396
September.....	11, 047
October.....	13, 201
November.....	11, 930
December.....	13, 236
January.....	11, 534
February.....	10, 602
March.....	10, 474
April.....	11, 561
May.....	12, 445
June.....	10, 829

ESTIMATES FOR ENSUING YEAR.

To meet the expenses of the department during the fiscal year ending June 30, 1893, I respectfully submit the following estimates:

Salaries:

One superintendent.....	\$1,600.00
One electrician	1,200.00
Three telegraph operators, at \$1,000 each.....	3,000.00
Three telephone operators, at \$720 each	2,160.00
Three repairmen, at \$720 each.....	2,160.00
One expert repairman.....	960.00
One battery man	600.00
Two laborers, at \$400 each	800.00

Total for salaries 12,480.00

Supplies of all kinds:

Battery supplies, office and telephone rents, and general expenses of all kinds.....	\$10,000.00
New poles and special line repairs.....	8,000.00
New instruments for the fourth and ninth police precincts.....	3,500.00

Total 21,500.00

In the possible event of having to remove the office to another locality, the further sum of \$1,200 would be required for that purpose.

RECAPITULATION.

For salaries.....	\$12,480.00
Ordinary expenses	10,000.00
New poles and special repairs	8,000.00
New instruments for fourth and ninth precincts	3,500.00
Possible removal of office	1,200.00

Total 35,280.00

It will be observed that a slight increase in the salaries of the telephone operators has been estimated for; I trust it may be granted, as an act of justice. They earn all I ask for them.

In concluding this report, I desire to thank the Commissioners for the support they have given the department. I also acknowledge, with thanks, the hearty coöperation of the police and fire departments in the several details of our (to a great extent) cowork.

The employés of this department have each done well his share of work. I commend each of them to your most favorable consideration, and to each one I convey my sincere thanks.

Respectfully submitted.

HENRY R. MILES,
Superintendent Telegraph and Telephone Service,
District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

I.

CHARITABLE AND REFORMATORY INSTITUTION.

II.

THE WASHINGTON ASYLUM.

WASHINGTON ASYLUM,
Washington, D. C., September 21, 1891.

GENTLEMEN: I herewith submit my annual report of the operations of this institution for the fiscal year ending June 30, 1891, together with a copy of the estimates for its maintenance for the fiscal year ending June 30, 1893, already furnished, and such recommendations as I believe will tend to bettering the condition of the institution in general.

Tables containing statistics and particulars relating to the persons received in the different departments of the institution will be incorporated for convenient reference. An account of the expenditures for maintenance, salaries, etc., will be found annexed; also a report of Dr. J. Wesley Bovee, visiting physician to the asylum, relating to the hospital department, is respectfully submitted.

The daily average number of persons cared for during the year is somewhat less than that of the year previous. The increased cost of maintenance is entirely due to the slight increase in cost of many articles of daily consumption.

The almshouse proper is in fair sanitary condition and not uncomfortably crowded in summer, but in winter is filled to such an extent that it is dangerous to the health of its inmates, and in case of fire the lives of all on the top floor would be imperiled. I beg leave to resubmit to you my recommendations of March 15, 1890, in relation to this matter, follows:

I beg leave to call your attention to the pressing need that exists for an enlargement of the almshouse and its present crowded condition, there being an average of 5 persons to each small room in the house. As a measure of relief I would recommend the erection of a frame structure or pavilion ward for the use of the aged colored women that we are now obliged to keep on the top floor. Many of these women are entirely helpless, and in case of a fire getting beyond control would be almost certain to be burned to death owing to their inability to escape. A one-story building, with porch, where they could be out in the open air and sunshine, would be one of the greatest boons that could be given these aged and helpless people. Their removal from the building would also improve the quarters of the white inmates, as all the younger ones could be put on the floor vacated by these old people with comparative safety from serious results in case of fire. I think a suitable building could be erected for about \$7,500, and hope that your honorable body may see fit to place this important subject before Congress for early action.

I deem this one of the most important improvements that could be made at the institution for the comfort and safety of all who are admitted to the almshouse, and trust it may meet your hearty approval.

I would again call your attention to the fact that the kitchen and bakery are too small for the increased amount of work required to be

done in them. An addition of 25 feet should be added to the kitchen, and at least 4 boilers placed in position, as at present we are obliged to make tea and coffee in boilers used for other purposes, to the injury of the purity of all articles so made. A second story should be placed over the entire kitchen building, to be used for storage and temporary lodging rooms, and connected with the almshouse by a covered bridge. This enlargement of the kitchen would cost about \$4,000. A refrigerator of about 5 tons capacity, with connecting apartments for the safe-keeping of meats, vegetables, milk, etc., is much needed, and I recommend that an appropriation of \$2,500 be asked for the erection of such structure.

The slight decrease in the daily average number of prisoners confined in the workhouse over the previous year I account for by the large number who have availed themselves of the good-conduct time allowed by the recent act of Congress, which allows five days off in each thirty for good conduct during imprisonment. The number released under this law during the past year was 1,009; number of days' maintenance saved to the institution by such release was 9,285.

In reference to the male workhouse I beg leave to quote from my last year's report my recommendation in regard to the building, *i. e.*:

The male workhouse in its present form is entirely inadequate for the proper confinement of the large number of persons it is called upon to shelter. To-day there are 213 male prisoners within its twenty-six small cells or rooms, an average of over 8 persons to each cell; and if it were not for the fact that nearly all of them are turned out in the open air at work during the day, disease and pestilence would be sure to prevail. The building in its conception and plans is faulty and behind the age. No two prisoners should be confined in the same cell; I therefore recommend that back buildings, with 150 cells, be erected at the earliest practical date for the accommodation of this class.

I am glad to state that the number of small boys committed has been much less this year than usual, and credit this to the determined effort of the Hon. John W. Douglass, president of the Board of Commissioners, District of Columbia, to prevent sending such cases to the workhouse. Judges Thomas F. Miller and Ivory G. Kimball, of the police court, have also exercised the utmost caution before sentencing boys brought before them by the officers charged with slight offenses, often giving them a second hearing and sending out for information concerning them before pronouncing sentence. I beg leave to tender my personal thanks to each of the gentlemen above named for their efforts in trying to place these boys in the reform school and prevent their being crowded into this institution.

The number of days' labor furnished the District in grading streets, cleaning the markets, work on the farm, etc., by the male prisoners during the year and the estimated value of the same is as follows:

	Days' work.	Rate per day.	Amount.
In grading streets:			
Prisoners.....	22,776	\$1. 00	\$22,776. 00
Officers.....	1,970	1. 50	2,955. 00
Horses.....	1,064	1. 00	1,064. 00
In cleaning markets, etc.:			
Prisoners.....	1,826	1. 00	1,826. 00
Officers.....	155	1. 50	232. 50
Horses.....	620	1. 00	620. 00
In shops.....	2,149	1. 00	2,149. 00
On farm.....	6,244	. 50	3,122. 00
In laundry.....	6,140	. 50	3,070. 00
In sewing room.....	1,842	. 50	921. 00
Total.....			38,735. 50

The quantity of farm produce raised during the year and estimated value of the same are as follows:

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
Hay	12	\$168. 00	Cuttings	45	\$22. 50
Beets	1, 100	385. 00	Corn	75	11. 25
Tomatoes	650	325. 00	Melons and small fruit		150. 00
Turnips	550	220. 00	Veal	284	17. 04
Carrots	600	300. 00	Pork	7, 681	460. 86
Parsnips	125	50. 00	Beef	1, 791	89. 55
Onions	80	100. 00	Eggs	912½	200. 75
Potatoes	75	45. 00	Chickens	100	25. 00
Celery	3, 800	76. 00	Milk	5, 840	1, 168. 00
Beans	38	38. 00			
Do	22½	45. 00	Total		3, 921. 95
Kale	25	25. 00			

The value of old material sold at auction and turned over to the collector, under direction of the property clerk, amounted to \$171.02.

RECAPITULATION.

Value of labor grading streets at farm, etc	\$38, 735. 50
Value farm products	3, 921. 95
Value old material sold	171. 02
Total	42, 828. 47

Which amount should be credited as a partial offset for the cost of the maintenance of the institution.

The female prison is in good condition except being overcrowded, which will be remedied by the building of an addition equal in extent to the present building, for which an appropriation of \$25,000 was granted last Congress.

The conduct of the inmates has much improved since last year, and is due to the efficient guards now at the house. The labor of the female prisoners consists of washing, scrubbing, making clothing for the inmates, and as waiters and cleaners at other branches of the institution, and, while valuable, brings no income, and is not sufficient to keep them all at work. I therefore recommend that some suitable employment that does not compete with honest labor be instituted for them, to prevent idleness, consequent mischief and bad conduct while under confinement.

The clothing used at the institution and made at the female work-house and tailor shop the past year was as follows:

Workhouse coats	143	Bedticks	101
Workhouse pants	390	Pillow ticks	112
Workhouse vests	73	Pillowcases	126
Jeans coats	25	Sheets	510
Jean pants	61	Chemise	485
Jean vests	24	Petticoats	182
Melton coats	40	Nightgowns	135
Melton pants	67	Aprons	169
Melton vests	52	Gowns	141
White shirts	354	Towels	185
Check shirts	586	Dresses	97
Drawers	246	Flannel shirts	40
Basques	4	Underwaists	33

On the 16th of July of last year work was commenced in building an additional story to the dispensary, for use as quarters for the resident physician. This work was completed early in the following Sep-

tember, and while furnishing much-needed room for the medical staff, made quite an improvement in the appearance of the building, the rooms of which were repapered and the house painted inside and out, putting it in first-class condition. The roofs and inside woodwork of wards 1, 2, 3, 4 and 5, and hospital kitchen, were also repainted during the year.

The hospital department has been much improved, and as soon as the new surgical and maternity ward, with the contemplated dining-room (which was commenced last fall and completed early in the present summer under directions of Mr. Thomas B. Entwisle, inspector of buildings) can be furnished, will be well equipped, with the exception of a ward for white men. I have estimated this year for the erection of a ward suitable for this purpose, and trust that an appropriation may be secured for it. I also recommend that the present ward be repaired and kept as a home for incurables.

A lavatory or bathing room for the inmates of the male workhouse was also built during the year, under the superintendence of the inspector of buildings, the completion of which adds materially to the comfort of its inmates, but by reducing the estimates given for this improvement it was necessary to leave off the top story. I have added \$1,500 in the estimates for its construction next year.

The appropriation of \$550, secured for new roofing for the male workhouse, was expended for that purpose by putting on a felt-lined tin roof and painting the same.

A wire fence, 6 feet high, was built during the past spring around the two lower magazine buildings occupied by the old colored men, which adds much to the security of these old people, and relieves the anxiety of their straying away and becoming lost.

The old storehouse near the river was destroyed by fire February 4, 1891. The wall has since been taken down, the bricks cleaned and racked up for use in building a barn for cows.

The live stock on the place at present consists of 17 horses, 1 bull, 13 cows, and 111 hogs and shoats, all in health and fine condition.

Among the improvements during the year was the conversion of part of reservation 13 (recently transferred to the Commissioners of the District of Columbia by Congress for use of the asylum) into a burial ground for the burial of the deceased indigent poor of the District who are buried at public expense. The grounds have been graded, roads laid out, and trees planted. First interment was made in the new ground October 17, 1890.

I desire again to call your attention to the smallpox hospital located now in a part of the potter's field or burying ground for deceased paupers, and recommend its removal to some more isolated portion of the District, or its destruction.

Five hundred and sixty-four coffins were issued on order of the health office and coroner, and 65 were used at the institution for the year ending June 30, last. During the same time there were 627 burials in potter's field.

Forty-one persons among the inmates of the almshouse, workhouse, and hospital have been tried by process of law and sent to the asylum for the insane since last report.

Church services have been held as heretofore each Sabbath by members of the several churches of the District, who visit the inmates in the different buildings of the institution. These services have been well attended and much interest manifested.

The slight deficiency in the appropriation this year was due to the failure of the contractor for furnishing fresh and corned beef, as the price paid for that article for the remainder of the year was considerably in excess of the contract price, the difference being \$1,655.35 for the four months so furnished, which would more than cover all outstanding bills.

I would respectfully call your attention to the insufficient number of guards appropriated for the institution, and the meager compensation allowed for their dangerous, disagreeable, and laborious duties. There are but two positions on the whole staff that, in my judgment, receive an adequate compensation for services required, *i e.*, the visiting physician and matron, and their compensation is not too great.

The overseers and watchmen, whose duties are nearly alike, receive \$600 and \$365 respectively. There are five only of each class, and the number should be increased to eight each, the former to receive \$750 and the latter \$500 per annum. These men are on duty thirty-six hours out of every forty-eight; their work is unhealthy, disagreeable, and dangerous, and we are compelled by the small pay allowed to accept the services of men of only moderate capacity, whereas, if my recommendations could be carried out, a much better class of officers could be secured and the institution improved. Some of the officers employed are worthy of promotion and better pay, and I am obliged to each and everyone engaged for faithful performance of duty under such discouraging circumstances. I trust, gentlemen, that you will give this subject your careful consideration, as I deem it one of the most important acts for the benefit of the institution.

The visiting committee appointed by your honorable board have made frequent inspections during the past year, and have shown a lively interest in the welfare of the institution. The members of the committee at present are Mr. F. L. Moore, W. E. Parsons, D. D., O. G. Staples, esq., Mrs. Mary L. Millmore, Mrs. Appleton P. Clark.

To each individual member of the committee I owe my sincere thanks for encouragement and aid, and, to your honorable board, my loyal service for your continued confidence.

Very respectfully,

WALTER H. STOUTENBURGH,
Intendant Washington Asylum.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

STATISTICAL TABLES.

WORKHOUSE.

Prisoners in workhouse July 1, 1890.....	259
Prisoners received	4,427
	4,686
Prisoners discharged.....	4,301
Prisoners eloped	68
Prisoner died	1
	4,370
Total remaining in workhouse June 30, 1891	316

COLOR AND SEX.

White males.....	1, 070
White females	201
Colored males.....	2, 264
Colored females.....	892
Total	4, 427

	Single.	Married.	Total.	Can read and write.	Can not read or write.	Total.
White males.....	842	228	1, 070	837	233	1, 070
White females	66	135	201	104	97	201
Colored males.....	1, 753	511	2, 264	1, 186	1, 078	2, 264
Colored females.....	651	241	892	397	495	892
Total	3, 312	1, 115	4, 427	2, 524	1, 903	4, 427

Ages.

	White.		Colored.	
	Male.	Female.	Male.	Female.
15 years and under	9	2	271	47
16 to 20 years	88	6	727	341
Over 20 years.....	973	193	1, 266	504
Total	1, 070	201	2, 264	892

Number of times committed.

	White males.		White females.		Colored males.		Colored females.	
	Number committed.	Number commitments.	Number committed.	Number commitments.	Number committed.	Number commitments.	Number committed.	Number commitments.
1 time	569	569	54	54	1, 156	1, 156	402	402
2 times	88	176	19	38	267	534	76	152
3 times	35	105	7	21	94	282	48	144
4 times	22	88	5	20	28	112	16	64
5 times	7	35	3	15	14	70	12	60
6 times	6	36	4	24	12	72	7	42
7 times	4	28	3	21	2	14	4	28
8 times	1	8	1	8	3	24		
10 times	1	10						
15 times	1	15						
Total		1, 070		201		2, 264		892

Nativity of inmates.

State, country, etc.	Number.	State, country, etc.	Number.
<i>Native.</i>		<i>Native—Continued.</i>	
District of Columbia.....	2, 039	Minnesota.....	1
Virginia.....	904	Nebraska.....	1
Maryland.....	661		4, 090
Pennsylvania.....	133		
New York.....	115	<i>Foreign.</i>	
North Carolina.....	25	Ireland.....	205
Ohio.....	18	Germany.....	34
Massachusetts.....	16	England.....	31
Connecticut.....	16	Scotland.....	12
New Jersey.....	16	Switzerland.....	9
South Carolina.....	14	West Indies.....	5
West Virginia.....	14	Canada.....	5
Alabama.....	14	Sweden.....	5
Kentucky.....	12	Italy.....	5
Indiana.....	12	France.....	4
New Hampshire.....	10	Denmark.....	4
Illinois.....	7	Russia.....	4
Michigan.....	7	Persia.....	1
Georgia.....	11	Portugal.....	1
Louisiana.....	6	New Brunswick.....	1
Tennessee.....	6	Nova Scotia.....	2
Florida.....	6	Newfoundland.....	1
Rhode Island.....	5	Mexico.....	1
Maine.....	4	Brazil.....	1
Texas.....	4	Cuba.....	1
Delaware.....	4	Africa.....	1
Missouri.....	2	At sea.....	1
Mississippi.....	2	Unknown.....	3
Arkansas.....	2		
Wisconsin.....	1		
Utah.....	1	Total.....	4, 427
Iowa.....	1		

Charges.

Charge.	Number.	Charge.	Number.
Disorderly.....	2, 057	Indecent exposure and profanity.....	2
Vagrancy.....	1, 550	Professional thief.....	2
Profanity.....	280	Unlicensed junk-dealer.....	2
Carrying concealed weapons.....	106	Depositing fecal matter in spring.....	1
Indecent exposure.....	77	Disturbing an entertainment.....	1
Trespass on parks.....	44	Aiding a prisoner to escape.....	1
Throwing stones.....	28	Discharging fire arms in alley.....	1
Concealed weapons and disorderly.....	25	Profanity and throwing stones.....	1
Disorderly and profanity.....	21	Dropping stones from cart in street.....	1
Violating police regulations.....	19	Destroying private property and throw-	
Disorderly and vagrancy.....	19	ing stones.....	1
Keeping unlicensed bar.....	17	Obstructing street.....	1
Destroying private property.....	17	Profanity and destroying private prop-	
Fast riding.....	16	erty.....	1
Cruelty to animals.....	11	Professional confidence person.....	1
Fast driving.....	7	Unlicensed restaurant.....	1
Unlicensed produce dealer.....	6	Unlicensed bar and disorderly.....	1
Throwing stones and disorderly.....	6	Profanity and disturbing church.....	1
Maintaining a nuisance.....	6	Disorderly and destroying public prop-	
Disturbing a meeting.....	6	erty.....	1
Concealed weapons and vagrancy.....	5	Vagrancy and indecent exposure.....	1
Disorderly and indecent exposure.....	4	Violating hack law and profanity.....	1
Violating hack law.....	4	Disorderly and firing pistol in street.....	1
Discharging fire arms in street.....	4	Profanity and trespass on park.....	1
Profanity and concealed weapons.....	4	Playing ball in street.....	1
Disorderly and destroying private prop-		Violating police regulations and cruelty	
erty.....	4	to animals.....	1
Vagrancy and profanity.....	3	Violating building regulations.....	1
Vagrancy and destroying private prop-		Fast riding and profanity.....	1
erty.....	3	Trespass on park and disorderly.....	1
Peddling without license.....	3	Disorderly, indecent exposure, and va-	
Obstructing sidewalk.....	3	grancy.....	1
Fast driving and disorderly.....	3	Eloped and recaptured.....	33
Using explosives in street.....	2		
Disorderly and cruelty to animals.....	2	Total.....	4, 427
Refusing to pay hack hire.....	2		

Occupation of inmates.

Occupation.	Number.	Occupation.	Number.
Laborer	1,696	Sail-maker	2
Laundress	477	Chair-caner	2
Servant	428	Stonemason	2
Driver	294	Stair-builder	2
Seamstress	112	Cabinetmaker	2
Painter	77	Photographer	2
Carpenter	71	Cutler	2
Cook	57	Salesman	2
Shoemaker	45	Butler	2
Waiter	45	Miner	2
Barber	45	Plate-printer	2
Plasterer	43	Drummer	1
Printer	38	Chambermaid	2
Clerk	36	Teacher	2
Bricklayer	36	Carriage-painter	1
Tinner	34	Clock-repairer	1
Hostler	32	Doctor	1
Baker	30	Iron-worker	1
Plumber	27	Wood-sawyer	1
Peddler	27	Actor	1
Bootblack	25	Scourer	1
Whitewasher	22	Oyster-dealer	1
Newsboy	22	Foreman	1
Sailor	20	Brewer	1
Fireman	17	Domestic	1
Butcher	17	Dairyman	1
Farmer	15	Horse-dealer	1
Tailor	15	Hackman	1
Blacksmith	13	Grocer	1
Molder	10	Barber's helper	1
Hod-carrier	10	Well-digger	1
Soldier	11	Bridge-builder	1
Huckster	9	Druggist	1
Farrier	9	Priester	1
Paver	8	Miller	1
Housekeeper	8	Undertaker	1
Upholsterer	8	Spinner	1
Bartender	8	Brakeman	1
Mariner	7	Florist	1
Stonecutter	7	Cab-driver	1
Lawyer	7	Meat-cutter	1
Coachman	7	Coal passer	1
Machinist	6	Roofer	1
Gardner	5	Draftsman	1
Bookbinder	5	Laundryman	1
Tinker	5	Broom-maker	1
Boiler-maker	5	Slater	1
Paper-hanger	4	Restaurant-keeper	1
Correspondent	4	Attorney	1
Engineer	4	Soap-boiler	1
Watchman	4	Potter	1
Storekeeper	4	Lather	1
Messenger	4	Telegraph operator	1
Nurse	4	Steam-fitter	1
Lamplighter	3	Jeweler	1
Janitor	3	Steel-worker	2
Weaver	3	Car-driver	1
Basket-maker	4	Core-maker	1
Glass-blower	3	Horse doctor	1
Porter	3	Rigger	1
Harness-maker	3	Watch-maker	1
Rag-dealer	3	Book agent	1
Cigar-maker	3	Coppersmith	1
Junk-dealer	3	Special officer	1
Steward	2	Stove-polisher	1
Confectioner	2	Shell-worker	1
Bell-boy	2	Trunk-maker	1
Gas-fitter	2	Wheelwright	1
Showman	2	Locksmith	1
Lineman	2	No occupation	318
Rider	2		
Electrician	2		
		Total	4,427

ALMSHOUSE.

Inmates in almshouse July 1, 1890	169
Inmates received	182
	351
Inmates discharged	193
Inmates died	5
	198
Total number remaining June 30, 1891.....	153

COLOR AND SEX.

White males	65
White females	36
Colored males	57
Colored females	24
	182

Daily average number of inmates in the institution for the year ending June 30, 1891.

	White.		Colored.		Total.
	Males.	Females.	Males.	Females.	
Workhouse	70	18	130	58	276
Almshouse.....	52	34	53	43	182
Hospital	19	10	20	19	68
Total.....	141	62	203	120	526

Nativity of inmates.

State, country, etc.	Number.	State, country, etc.	Number.
<i>Native.</i>		<i>Foreign.</i>	
District of Columbia.....	36	Ireland	83
Virginia	40	Germany	7
Maryland	30	France	5
Pennsylvania.....	4	England	3
Tennessee.....	4	Scotland	3
Indiana.....	2	Switzerland	1
New York.....	2	Denmark	1
North Carolina.....	2	Russia.....	1
Massachusetts.....	1	Canada	1
Ohio.....	1		
Rhode Island.....	1	Total foreign	55
Louisiana	1	Total native	127
Maine	1		
Mississippi.....	1	Aggregate	182
Georgia.....	1		
Total native	127		

154 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Changes occurring among officers and employes from July 1, 1890, to June 30, 1891.

Name.	Occupation.	When appointed.	Resignation or discharge.
F. S. Stoutenburgh.....	Matron.....	June 6, 1882	*July 2, 1890
William Arnold.....	Watchman.....	Apr. 1, 1885	July 15, 1890
Robert F. Ratherdale.....	Blacksmith.....	Apr. 1, 1887	July 20, 1890
Thomas Reardon.....	Tailor.....	July 1, 1887	May 7, 1891
Emery Wallingsford.....	Ambulance driver.....	Sept. 3, 1887	Mar. 31, 1891
Charles S. Prather.....	Temporary watchman.....	Nov. 2, 1887	Sept. 29, 1890
Martha Mundell.....	Keeper female workhouse.....	Aug. 1, 1888	Apr. 30, 1891
Thomas Schnopp.....	Overseer.....	Sept. 4, 1888	Aug. 15, 1890
Agnes Reeves.....	Nurse.....	June 16, 1889	Sept. 30, 1890
John Lee.....	Temporary watchman.....	July 1, 1889	Mar. 31, 1891
John Watt.....	do.....	Aug. 12, 1889	Nov. 29, 1890
Henry J. Crosson.....	Medical student.....	Oct. 1, 1889	Oct. 1, 1890
Thomas P. Mohun.....	Resident physician.....	Oct. 16, 1889	Oct. 15, 1890
Matthew W. Kent.....	Watchman.....	Nov. 12, 1889	Mar. 31, 1891
Jacob A. Graham.....	Overseer.....	Dec. 1, 1889	Mar. 15, 1891
Rachel Graham.....	Keeper female workhouse.....	do.....	Do.
Jennie McCoy.....	Nurse.....	Jan. 1, 1890	Apr. 30, 1891
Thomas Butler.....	do.....	do.....	Aug. 15, 1890
John E. Walsh.....	Resident student.....	Jan. 23, 1890	Aug. 31, 1890
Edward Smith.....	Nurse.....	Apr. 13, 1890	July 31, 1890
Hattie Thornton.....	Cook.....	May 1, 1890	Aug. 31, 1890
Thomas Trundle.....	do.....	June 5, 1890	July 5, 1891
Christine Hilfinger.....	Matron.....	July 1, 1890	Oct. 31, 1890
Benjamin C. Sears.....	Assistant engineer.....	July 11, 1890	
Ludwich Lang.....	Watchman.....	July 16, 1890	May 13, 1891
Frank Tolbert.....	Blacksmith.....	July 24, 1890	
William Wyman.....	Cook.....	Aug. 6, 1890	Jan. 31, 1891
Charles P. Kenyon.....	Overseer.....	Aug. 16, 1890	Mar. 31, 1891
Edward Smith.....	Nurse.....	Aug. 16, 1890	
Lucy Allen.....	Cook.....	Sept. 1, 1890	Mar. 31, 1891
Elizabeth B. Reed.....	Trained nurse.....	Sept. 5, 1890	
Walter M. Wells.....	Medical student.....	Sept. 13, 1890	June 22, 1891
Perry Talbert.....	Temporary watchman.....	do.....	
Henry T. McGowan.....	do.....	Oct. 6, 1890	Oct. 13, 1890
Joseph Coghlan.....	do.....	Oct. 15, 1890	
John E. Walsh.....	Resident physician.....	Oct. 16, 1890	
Corinne Lowe.....	Matron.....	Nov. 1, 1890	Nov. 6, 1890
Janet W. Lowe.....	do.....	Jan. 1, 1891	
Olie Ratherdale.....	Nurse.....	Jan. 10, 1891	Apr. 30, 1891
Edward Rockett.....	Cook.....	Feb. 1, 1891	Do.
John Hammond.....	Overseer.....	Mar. 16, 1891	
Adda Hammond.....	Keeper female workhouse.....	do.....	
J. Paul Stosch.....	Overseer.....	Apr. 1, 1891	
Emery Wallingsford.....	Night watchman.....	do.....	
James W. Lowe.....	Watchman.....	do.....	
Matthew W. Kent.....	Ambulance driver.....	do.....	
Ellen Smith.....	Cook.....	do.....	May 15, 1891
Cornelius Offutt.....	Painter.....	do.....	
Maggie A. Wall.....	Keeper female workhouse.....	May 1, 1891	
William A. Thompson.....	Cook.....	do.....	June 30, 1891
Mary Joseph.....	Nurse.....	do.....	May 12, 1891
James A. O'Connor.....	Tailor.....	May 15, 1891	
Elizabeth Douglass.....	Cook.....	June 1, 1891	
William Gwathmey.....	Nurse.....	do.....	
Albert Youst.....	Watchman.....	June 20, 1891	

* Died.

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 155

Detailed account of receipts and expenditures of Washington Asylum from July 1, 1890, to June 30, 1891.

SALARIES.

W. H. Stoutenburgh, intendant	\$1, 200. 00
J. W. Bovee, visiting physician	1, 080. 00
T. B. Mohun, resident physician	139. 55
J. E. Walsh, resident physician	340. 45
D. Tindall, clerk	600. 00
Christine Hilfinger, matron	200. 50
J. W. Lowe	300. 00
H. Miller, baker	420. 00
W. C. Thompson, overseer	800. 00
G. Martin, overseer	600. 00
T. Schnopp, overseer	74. 94
J. H. Graham, overseer	423. 30
C. C. Bury, overseer	600. 00
M. Shea, overseer	600. 00
C. P. Kenyon, overseer	375. 06
J. Hammond, overseer	176. 70
J. P. Stosch, overseer	150. 00
J. A. Milstead, engineer	600. 00
J. D. C. Stoutenburgh, assistant engineer	350. 00
B. C. Sears, assistant engineer	291. 82
F. McEntee, watchman	365. 00
F. T. Auldrige, watchman	365. 00
D. Stewart, watchman	365. 00
M. W. Kent, watchman	273. 75
W. Arnold, watchman	14. 88
L. Lang, watchman	301. 99
J. W. Lowe, watchman	91. 25
A. Youst, watchman	11. 04
R. F. Ratherdale, blacksmith	16. 30
F. Talbert, blacksmith	281. 22
Rachel Graham, keeper female workhouse	211. 70
Martha Mundell, keeper of female workhouse	149. 80
Adda Hammond, keeper female workhouse	88. 30
Maggie A. Wall, keeper female workhouse	30. 20
Elizabeth B. Reed, trained nurse	344. 64
William H. Cook, hostler	229. 90
Thomas Reardon, tailor	226. 09
Jas. A. O'Connor, tailor	37. 89
Ella Boston, cook	120. 00
Hattie Thornton, cook	20. 20
Elizabeth Brown, cook	60. 00
Thomas Trundle, cook	56. 98
William Wyman, cook	58. 57
Lucy Allen, cook	69. 80
Edward Rockett, cook	23. 99
Ellen Smith, cook	14. 85
W. A. Thompson, cook	20. 10
Elizabeth Douglass, cook	9. 90
Edward Smith, nurse	70. 16
Addie Lucas, nurse	60. 00
Agnes Reeves, nurse	15. 00
Jennie McCoy, nurse	49. 95
Thomas Butler, nurse	7. 49
Olie Ratherdale, nurse	18. 29
Mary Joseph, nurse	1. 97
Edward Gwathney, nurse	4. 95
Total	13, 408. 47

CONTINGENT EXPENSES.

1890.	
July.	J. B. Bryan & Bro., groceries
	W. M. Galt & Co., flour and meal
	R. I. Varnell, fresh meat
	Thos. T. Keene, fresh and corned meat
	Myers & Loving, forage
	566. 84
	292. 85
	244. 80
	259. 84
	133. 20

156 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Detailed account of receipts and expenditures of Washington Asylum, etc.—Continued.

CONTINGENT EXPENSES—continued.

1890.		
July.	W. F. Hewitt, forage	\$34.00
	Great Falls Ice Company, ice	66.53
	F. P. May & Co., hardware	52.97
	W. L. King & Bro., sole and harness leather	46.15
	Henry Lyles, sand	12.50
	Jackson & Co., groceries	9.60
	Jackson & Co., marketing	5.63
	Thos. W. Smith, lumber	8.60
	E. C. Gatchell, carpenter	78.00
	J. Lee, extra overseer	61.00
	C. S. Prather, extra watchman	36.25
	J. Watt, night watchman	37.50
	E. Wallingsford, laborer	31.00
	T. Reardon, tailor	25.00
	T. Urban, gardener	15.60
	T. Cook, herdsman	15.50
Aug.	J. B. Bryan & Bro., groceries	702.08
	W. M. Galt & Co., flour and meal	342.50
	Mayfield & Hieston, fuel	1,101.75
	Shanahan, Riley & Co., paints, oils, etc	112.96
	Woodward & Lothrop, dry goods and stationery	83.93
	E. G. Wheeler, hardware	8.35
Aug.	E. G. Wheeler, hardware	59.89
	W. F. Hewett, forage and cement	44.50
	H. I. Gregory, hardware	40.50
	William Ballantyne & Son, stationery	28.83
	A. R. Williams, lime, etc	16.75
	Byron S. Adams, printing	1.25
	W. J. C. Dulaney, stationery	1.45
	C. C. Carroll, fresh and corned meat	523.96
	J. W. Boteler & Son, crockery ware, cutlery, etc	100.00
	Myers & Loving, forage, etc	94.69
	W. O. Berry, roofing, etc	67.99
	Charles T. Carter, hardware	64.81
	E. C. Gatchell, carpenter	70.50
	J. Lee, extra overseer	56.00
	C. S. Prather, extra watchman	38.75
	J. Watt, night watchman	38.75
	E. Wallingsford, laborer	31.00
	T. Reardon, tailor	5.00
	T. Urban, gardener	15.60
	T. Cook, herdsman	15.50
	Great Falls Ice Company, ice	64.43
	Thomas W. Smith, lumber	104.16
	W. H. Butler, paints, glass, etc	17.84
	Scheller & Stevens, drugs, etc	58.11
	Jackson & Co., marketing	2.23
	John A. Baker, garden seed, etc	33.55
	E. F. Brooks, gas fixtures	13.25
	R. J. Ernshaw, forage	60.62
Sept.	J. B. Bryan & Bro., groceries	708.08
	Jas. L. Barbour & Son, groceries	471.24
	W. C. Galliher & Bro., lumber	97.30
	Myers & Loving, forage, etc	94.85
	Shanahan, Riley & Co., paints, etc	68.15
	Rabbitt & Crown, poultry	45.00
	W. F. Hewett, forage	34.00
	M. A. Tappan, hardware	30.00
	D. H. Staly, pigs	25.00
	W. A. Bagby, pigs	25.00
	W. E. Stockett & Co., register for hospital	19.25
	Chas. T. Carter, hardware	9.82
	R. Harris & Co., clocks	1.50
	F. P. May & Co., hardware	10.49
	Charlotte Bailey, pigs	10.00
	Henry McShane & Co., plumber's material	89.29

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 157

Detailed account of receipts and expenditures of Washington Asylum, etc.—Continued.

CONTINGENT EXPENSES—continued.

1890,		
Sept.	Thos. W. Smith, lumber	\$54.07
	J. W. Boteler & Son, dishes, cutlery, etc	46.50
	Scheller & Stevens, drugs	45.00
	Woodward & Lothrop, dry goods	10.25
	W. E. Muncaster, pigs	15.00
	Lewis Baar, repairs to sewing machine	7.80
	W. M. Galt & Co., flour and meal	372.05
	W. H. Butler, oil, etc	7.44
	E. C. Gatchell, carpenter	78.00
	J. Lee, extra overseer	52.00
	P. Talbert, extra overseer	24.00
	C. S. Prather, extra watchman	33.75
	J. Watt, night watchman	35.00
	E. Wallingsford, laborer	30.00
	T. Urban, gardener	15.60
	T. Cook, herdsman	15.00
	Cannon & Chandler, marketing	11.28
	Cannon & Chandler, marketing	11.51
	Frank Hume, groceries	776.01
	C. C. Carroll, fresh and corned beef	460.48
	Woodward & Lothrop, dry goods	121.98
	Robert Cohen, shoes	114.38
	E. G. Wheeler, hardware	22.86
	E. Morrison, stationery	16.21
	S. Wolf & Co., insurance	377.49
	Washington Gaslight Company, gas, July	23.26
	Washington Gaslight Company, gas, August	26.41
	F. P. May & Co., hardware	101.44
	R. J. Earnshaw, forage	67.15
	Great Falls Ice Company, ice	60.48
	Henry McShane & Co., plumber's material	56.45
	Pettit & Dripps, boiler repairs	12.46
	H. H. Turner, sweeping boiler flues	6.00
	Jackson & Co., market bill	5.44
Oct.	J. B. Bryan & Bro., groceries	709.26
	B. Rich & Sons, shoes, dry goods, etc	439.10
	W. M. Galt & Co., flour and meal	414.25
	F. Hume, groceries	237.33
	Myers & Loving, forage	113.10
	Scheller & Stevens, drugs	45.65
	Shanahan, Riley & Co., paint, oil, etc	40.81
	E. G. Wheeler, hardware	35.76
	W. F. Hewett, forage	34.00
	Linotype Co., printing	20.92
	Wm. Ballantyne & Son, stationery	13.95
	Francis B. Mohun, furniture	13.50
	Libby, Bittenger & Miller, lumber	12.50
	Jackson & Co., groceries	9.60
	W. H. Butler, naphtha and lamp burners	7.86
	A. R. Williams, lime	4.75
	R. Harris & Co., 2 clocks	3.00
	W. J. C. Dulaney, stationery	2.06
	B. S. Adams, labels for hospital	3.00
	E. C. Gatchell, carpenter	81.00
	J. Lee, extra overseer	62.00
	P. Talbert, extra overseer	46.50
	J. Coghlan, extra watchman	15.00
	J. Watt, night watchman	41.08
	E. Wallingsford, laborer	31.00
	T. Urban, gardener	16.20
	T. Cook, herdsman	15.50
	H. T. McGowan, extra overseer	9.00
	Lansburgh & Bro., dry goods	733.10
	C. C. Carroll, fresh and corned beef	491.41
	Woodward & Lothrop, dry goods and stationery	430.78
	Woodward & Lothrop, dry goods	36.97

158 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Detailed account of receipts and expenditures of Washington Asylum, etc.—Continued.

CONTINGENT EXPENSES—continued.

1890.		
Oct.	Hartford Woven Wire Mattress Company, bedsteads and mattresses	\$146.25
	Z. D. Gilman, drugs	114.89
	R. J. Earnshaw, forage	68.38
	W. E. Muncaster, one Jersey bull	50.00
	John McDermott, repairs to buggy	30.00
	Great Falls Ice Company, ice	27.40
	T. W. Smith, lumber	6.33
	Jackson & Co., marketing	5.64
	John A. Baker, seed	4.90
	J. G. & J. M. Waters, cement	3.60
	E. H. Jones, fruit trees	47.50
	J. Ed. Chapman, fuel	132.50
	Washington Gaslight Company, September and October gas	97.85
Nov.	J. B. Bryan & Bro., groceries	913.27
	Wm. M. Galt & Co., flour and meal	491.60
	B. Rich & Son, shoes and dry goods	960.45
	Jas. L. Barbour, groceries	303.03
	Myers & Loving, forage	148.59
	W. P. Galliher & Bro., lumber	73.70
	Lutz & Bro., cart harness	70.50
	Scheller & Stevens, drugs	38.55
	J. W. Boteler & Son, dishes, etc	37.62
	W. F. Hewett, forage	34.00
	W. E. Muncaster, pigs	30.00
	W. L. King, leather	27.20
	Robert Cohen, shoes	17.16
	Shanahan, Riley & Co., paint, etc	10.27
	Jackson & Co., groceries	9.60
	Melville Lindsay, horse cover	4.50
	M. A. Tappan, police nippers	3.60
	H. I. Gregory, repairs to stoves, etc	93.27
	Libby, Bittinger & Miller, lumber	19.25
	A. R. Williams, lime	9.50
	Ramsey & Bisbee, letter jackets	3.35
	W. J. C. Dulaney, stationery	3.24
	W. S. Anderson, fruit	15.00
	John H. Short, hickory batons	2.40
	V. B. Johnson, fuel	1,050.00
	C. C. Carroll, fresh and corned beef	458.67
	E. C. Gatchell, carpenter	72.00
	J. Lee, extra overseer	60.00
	P. Talbert, extra overseer	45.00
	J. Coghlan, extra watchman	37.50
	J. Watt, night watchman	47.40
	E. Wallingsford, laborer	30.00
	T. Urban, gardener	15.00
	T. Cook, hostler	15.00
	Wm. Ballantyne & Son, stationery	16.68
	Jackson & Co., marketing	11.54
	R. J. Earnshaw, forage	82.46
	Great Falls Ice Company, ice	44.14
	Z. D. Gilman, drugs	30.91
	John Lee, poultry	19.62
	F. P. May & Co., hardware	63.18
	C. Becker, horse blankets	18.00
Dec.	J. B. Bryan, groceries	747.66
	Frank Hume, groceries	560.44
	B. Rich & Sons, shoes	90.50
	E. G. Wheeler, hardware	86.84
	E. G. Wheeler, hardware	18.13
	M. W. Beveridge, spittoons, tin cups, etc	59.50
	J. W. Boteler & Son, cutlery, etc	33.00
	Scheller & Stevens, drugs	31.71
	W. L. King & Bro., leather	27.27
	Jackson & Co., groceries	19.20
	Shanahan, Riley & Co., paint brushes, etc	6.79

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 159

Detailed account of receipts and expenditures of Washington Asylum, etc.—Continued.

CONTINGENT EXPENSES—continued.

1890.

Dec.	Byron S. Adams, printing	\$3.40
	Royce & Marceau, electrical supplies	3.27
	W. J. C. Dulaney, stationery	3.20
	Rabbit & Crown, poultry	126.00
	J. B. Bryan & Bro., groceries	45.20
	W. F. Hewett, forage	34.00
	W. H. Butler, glass	23.83
	W. H. Butler, lamp	1.00
	Myers & Loving, forage	154.59
	W. M. Galt & Co., flour and meal	350.25
	E. C. Gatchell, carpenter	81.00
	J. Lee, extra overseer	62.00
	P. Talbert, extra overseer	43.50
	J. Coghlan, extra watchman	38.75
	E. Wallingsford, laborer	31.00
	T. Urban, gardener	16.20
	T. Cook, hostler	15.50
	Charles T. Carter, hardware	26.19
	C. C. Carroll, fresh and corned beef	460.87
	W. B. Moses & Son., furniture, paper hanging, etc	505.25
	Pettit & Dripps, repairs to boiler	10.60
	Lewis Baar, sewing machine supplies	3.50
	R. J. Earnshaw, forage	82.46
	Great Falls Ice Company, ice	38.99
	E. Morrison, stationery	6.90
	Jeannette Blum, dry goods	3.12
	Shanahan, Riley & Co., turpentine	2.10
	F. P. May & Co., hardware	44.15
	Z. D. Gilman, drugs, etc	12.07
	Cannon & Chandler, vegetables	13.12
	E. F. Brooks, gas burner	1.00
	Jackson & Co., marketing	12.67
	Henry McShane & Co., plumber's supplies	53.72
	John A. Baker, garden seed	7.95
	Public Printer	8.55

1891.

Jan.	J. B. Bryan & Bro., groceries	525.85
	W. M. Galt & Co., flour and meal	199.70
	Robert Cohen, shoes	54.00
	W. F. Hewett, forage	34.00
	E. G. Wheeler, hardware	30.98
	B. S. Adams, printing	29.05
	Scheller & Stevens, drugs, etc	24.47
	Myers & Loving, forage	142.59
	J. B. Kendall, cart wheels, axles, etc	74.73
	H. I. Gregory, stove fixtures	29.00
	C. C. Carroll, fresh and corned beef	467.21
	Frank Hume, groceries	238.35
	Jas. L. Barbour & Son, groceries	136.45
	J. W. Boteler & Son, cooking utensils, dishes, etc	36.55
	W. H. Butler, glass, oil, etc	31.22
	Great Falls Ice Company, ice	27.75
	Tschiffely & Evans, combs, brushes, etc	26.50
	Caroline Hannaman, initials for cabs	4.50
	Chas. T. Carter, hardware	2.05
	Byron S. Adams, printing	1.33
	J. Baumgarten & Son, badges	9.00
	R. J. Earnshaw, forage	82.46
	Z. D. Gilman, drugs	31.00
	E. C. Gatchell, carpenter	75.00
	J. Lee, extra overseer	62.00
	P. Talbert, extra overseer	46.50
	J. Coghlan, extra watchman	38.75
	E. Wallingsford, laborer	31.00
	T. Urban, gardener	15.00
	T. Cook, herdsman	15.50

160 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Detailed account of receipts and expenditures of Washington Asylum, etc.—Continued.

CONTINGENT EXPENSES—continued.

1891.		
Jan.	Lutz & Bro., cart harness.....	\$68.50
	Jackson & Co., marketing.....	6.96
	Robert Leitch & Son, hose, nozzle, coupling, etc.....	14.66
	Washington Gaslight Company, gas, November.....	74.51
	Washington Gaslight Company, gas, December.....	86.77
	Washington Gaslight Company, gas, January.....	95.39
Feb.	J. B. Bryan & Bro., groceries.....	530.90
	B. Rich & Son, shoes.....	219.75
	Charles T. Carter, hardware.....	48.18
	E. G. Wheeler, hardware.....	32.63
	W. F. Hewett, forage.....	30.60
	W. E. Muncaster, pigs.....	23.00
	F. P. May, hardware.....	17.90
	Henry Lyles, sand.....	12.50
	H. I. Gregory, tin and charcoal.....	11.00
	Jackson & Co., groceries.....	9.60
	W. L. King, & Bro., shoe lasts, etc.....	3.70
	A. R. Williams, lime.....	5.05
	W. M. Galt & Co., flour and meal.....	221.30
	W. T. Galliher & Bro., lumber.....	146.83
	James L. Barbour & Son, groceries.....	130.48
	Myers & Loving, forage.....	127.34
	James H. Birch, oysters.....	96.00
	The McMullen Woven-Wire Fence Company, wire fencing.....	75.00
	Scheller & Stevens, drugs.....	59.71
	M. W. Beveridge, tin cups, plates, and cuspadores.....	22.62
	William Ballentyne & Son, stationery.....	20.91
	R. J. Ernshaw, forage.....	74.28
	Henry McShane & Co., plumbers' supplies.....	36.19
	Great Falls Ice Company, ice.....	23.21
	Woodward & Lothrop, dry goods and stationery.....	20.34
	W. H. Butler, oil, lamps, and lamp chimneys.....	12.26
	C. Weisenborn, compressed yeast.....	9.80
	Lewis Baar, repairs to sewing machines.....	6.17
	Francis Miller, paints.....	6.00
	C. C. Carroll, fresh and corned beef.....	409.62
	V. B. Johnson, fuel.....	131.25
	W. B. Moses & Son, furniture.....	114.15
	E. C. Gatchell, carpenter.....	69.00
	J. Lee, extra overseer.....	56.00
	P. Talbert, extra overseer.....	42.00
	J. Coghlan, extra watchman.....	35.00
	E. Wallingsford, laborer.....	37.24
	T. Urban, gardener.....	14.40
	T. Cook, herdsman.....	14.00
	Shanahan, Riley & Co., paints, etc.....	81.10
	James L. Barbour & Son, groceries.....	43.87
	W. S. Anderson & Co., fruit.....	42.25
	Libby, Bittinger & Miller, lumber.....	40.00
	F. P. May & Co., hardware.....	32.22
	W. H. Butler, paints, glass, etc.....	21.86
	Z. D. Gilman, drugs.....	11.80
	C. Becker, horse brushes and combs.....	9.00
	Washington Gaslight Company, gas.....	79.76
	Woodward & Lothrop.....	151.60
	John A. Baker.....	1.25
Mar.	J. B. Bryan & Bro., groceries.....	690.96
	Frank Hume, groceries.....	388.93
	Myers & Loving, forage.....	135.94
	Lansburgh & Bro., dry goods.....	302.90
	W. L. King & Bro., leather.....	49.25
	G. S. Smith, 1 sewing machine.....	45.00
	E. G. Wheeler, hardware.....	11.51
	M. W. Beveridge, dishes.....	11.31
	H. I. Gregory, grate for fireplace.....	6.50
	Jackson & Co., marketing.....	7.93

Detailed account of receipts and expenditures of Washington Asylum, etc.—Continued,

CONTINGENT EXPENSES—continued.

1891.

Mar.	Jackson & Co., groceries	\$6.40
	Scheller & Stevens, drugs	55.38
	Woodward & Lothrop, dry goods	49.15
	W. F. Hewitt, forage	34.00
	W. M. Galt & Co., flour and meal	284.50
	B. Rich & Son, shoes and underwear	190.23
	W. B. Moses & Son, window shades, etc.	39.80
	F. P. May & Co., hardware	28.92
	Robert Cohen, shoes	5.40
	Rabbet & Crown, poultry	51.00
	Woodward & Lothrop, dry goods	34.85
	Joseph Auerbach, caps	22.50
	William Ballantyne & Son, stationery	8.00
	Byron S. Adams, printing	2.20
	J. Blum, dry goods	.96
	E. C. Gatchell, carpenter	73.50
	J. Lee, extra overseer	62.00
	P. Talbert, extra overseer	46.50
	J. Coghlan, extra watchman	38.75
	E. Wallingsford, laborer	41.23
	T. Urban, gardener	15.60
	T. Cook, hostler	15.50
	Cannon & Chandler, vegetables	13.83
	Jackson & Co., marketing	11.73
	C. Weisenborn, compressed yeast	9.80
	E. Morrison, stationery	.81
	Z. D. Gilman, drugs	40.64
	Great Falls Ice Company, ice	23.83
	James L. Barbour & Son, groceries	116.82
	John A. Baker, agricultural implements and seed	96.39
	F. P. May & Co., hardware	2.40
	Pettit & Dripps, 2 diaphragms	4.00
	E. F. Brooks, gas fixtures	7.00
	J. W. Boteler & Son, dishes, etc.	19.08
	James H. Birch, oysters	21.00
	Washington Gaslight Company, gas	71.15
	Cannon & Chandler	36.36
Apr.	J. B. Bryan & Bro., grocers	631.17
	W. M. Galt & Co., flour and meal	271.45
	R. J. Ernshaw, forage	152.53
	V. B. Johnson, fuel	105.00
	Myers & Loving, forage	103.54
	W. C. Galliher & Bro., lumber	92.31
	Shanahan, Riley & Co., paints	82.48
	H. I. Gregory, repairs to stoves, tinware, etc.	30.75
	W. H. Butler, paint brushes and glass	20.18
	Wm. Ballantyne & Son, postage stamps and stationery	12.18
	E. G. Wheeler, hardware	10.12
	Jackson & Co., grocers	9.60
	W. F. Hewett, forage	6.80
	Chas. C. Carter, hardware	6.15
	Melville Lindsay, rubber sheeting	5.40
	A. R. Williams, lime and hair	5.05
	John McDermott, repairs to wagon	58.50
	Jas. L. Barbour & Son, groceries	124.61
	J. T. Varnell, fresh and corned beef	1, 320.81
	Cannon & Chandler, vegetables	15.35
	C. Weisenborn, compressed yeast	12.95
	M. W. Beveridge, ice chest, cell buckets, etc.	139.75
	Scheller & Stevens, drugs	63.66
	Great Falls Ice Company, ice	40.60
	Myers & Loving, forage	33.44
	H. McShane & Co., plumbers' supplies	22.44
	John McDermott, repairs to wagon and new stretcher	150.00
	J. Ed. Chapman, fuel	79.50
	R. A. Golden, fresh fish	72.85

Detailed account of receipts and expenditures of Washington Asylum, etc.—Continued.

CONTINGENT EXPENSES—continued.

1891.

Apr.	Jackson & Co., marketing	\$10.77
	John A. Baker, grass seed	2.00
	Cannon & Chandler, vegetables	12.51
	J. G. & J. M. Waters, cement	4.80
	Shanahan, Riley & Co., turpentine	.42
	E. Morrison, carpenter's pencils	.18
	E. C. Gatchell, carpenter	64.50
	P. Talbert, watchman	54.25
	E. Wallingsford, watchman	45.00
	J. Coghlan, watchman	37.50
	M. W. Kent, ambulance driver	37.50
	T. Urban, gardener	15.60
	T. Cook, herdsman	15.00
	C. Offutt, painter	26.00
	Washington Gaslight Company, gas	62.76
May.	J. B. Bryan & Bro., groceries	811.02
	Frank Hume, groceries	402.00
	Wm. M. Galt & Co., flour and meal	197.50
	B. Rich & Son, shoes	182.80
	Woodward & Lothrop, dry goods	83.09
	Myers & Loving, forage	78.79
	Scheller & Stevens, drugs	45.82
	E. G. Wheeler, hardware	39.11
	W. L. King, leather	27.81
	William Wood & Co., subscription for medical journals	10.00
	Jackson & Co., groceries	9.60
	W. J. C. Dulaney, stationery	3.49
	W. B. Moses & Son., cocoa mats	3.04
	Lewis Baar, sewing-machine needles	1.09
	J. B. Bryan & Bro., groceries	33.90
	J. T. Varnell, fresh and corned beef	954.42
	James L. Barbour & Son	120.68
	F. P. May & Co., hardware	95.34
	R. J. Ernshaw, forage	89.40
	Great Falls Ice Company, ice	51.24
	Z. D. Gilman, drugs, April	32.19
	Z. D. Gilman, drugs, May	19.93
	Myers & Loving, forage	18.50
	Cannon & Chandler	17.63
	R. A. Golden, fresh fish	16.00
	C. Weisenborn, compressed yeast	16.10
	Jackson & Co., marketing	9.56
	H. I. Gregory, repairs to stoves	8.00
	A. R. Williams, lime	4.75
	Wm. Ballantyne & Son, stationery	1.80
	E. C. Gatchell, carpenter	52.50
	P. Talbert, watchman	52.50
	E. Wallingsford, watchman	46.50
	J. Coghlan, watchman	38.75
	C. Offutt, painter	26.00
	M. W. Kent, ambulance driver	38.75
	T. Urban, gardener	15.60
	T. Cook, herdsman	15.50
	Lansburgh & Bro., dry goods	213.41
	Libbey, Bittinger & Miller, lumber	19.25
	Tschiffley & Evans, combs	4.00
	Washington Gaslight Company, gas	28.76
June.	J. B. Bryan & Bro., groceries	549.24
	R. J. Ernshaw, forage	55.34
	W. C. Galliher & Bro., lumber	37.70
	Myers & Loving, forage	22.20
	Wm. Forsythe, surveying potter's field	20.00
	Wm. Ballantyne, stationery	8.07
	Jackson & Co., groceries	4.80
	Shanahan, Riley & Co., paint	3.77
	Z. D. Gilman, drugs	3.74

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 163

Detailed account of receipts and expenditures of Washington Asylum, etc.—Continued.

CONTINGENT EXPENSES—continued.

1891.		
June.	W. M. Galt & Bro., flour and meal	\$260. 70
	Scheller & Stevens, drugs, etc	20. 86
	W. H. Butler, paints, etc	6. 36
	Woodward & Lothrop, dry goods	5. 00
	E. G. Wheeler, hardware	3. 29
	E. C. Gatchell, carpenter	69. 75
	P. Talbert, watchman	52. 50
	E. Wallingsford, watchman	45. 00
	J. Coghlan, watchman	37. 50
	C. Offutt, painter	7. 00
	M. W. Kent, ambulance driver	37. 50
	T. Urban, gardener	15. 60
	T. Cook, herdsman	15. 00
	Rabbet & Crown, poultry	30. 00
	H. McShane & Co	6. 12
	B. S. Adams, printing	. 40
	Great Falls Ice Company, ice	76. 47
	M. W. Beveridge, dishes	8. 35
	Cannon & Chandler, marketing	9. 25
	C. Weisenborn, yeast	16. 10
	J. T. Varnell, fresh and corned beef	733. 52
	Total	45, 001. 98

Appropriations for support of the institution for the past year.

For contingent expenses	\$45, 000. 00
By repayment	1. 98
	45, 001. 98
Expended	45, 001. 98
Bills unpaid, estimated	574. 07
For salaries	13, 685. 69
Expended	13, 408. 47
Unexpended	277. 22
For bath room at male workhouse	5, 850. 00
Expended	5, 842. 40
Unexpended	7. 60
For new ward	4, 200. 00
Expended	4, 200. 00
For magazine building	20, 000. 00
Expended	43. 61
Unexpended	19, 956. 39
For new roof at male workhouse	550. 00
Expended	550. 00

WASHINGTON ASYLUM,
June 30, 1891.

GENTLEMEN: In compliance with your letter of the 1st instant, I beg leave to submit the following estimates for the maintenance of this institution for the fiscal year ending June 30, 1893. One thousand eight hundred and fifty dollars of the increase in salaries is for additional and

much-needed help; the balance of increase, \$1,710, is for increase of pay of worthy and efficient employes whose compensation is now lower than that in corresponding positions of any similar institution in the country. I have asked for \$10,000 increase in the contingent expenses allowed for the coming year, and have given close estimates for several improvements, which I beg may receive your approval.

For contingent expenses, including provisions, fuel, forage, groceries, meats, dry goods, shoes, lumber, hardware, medicines, gas, ice, repairs, extra services, and other necessary articles	\$60,000
Addition to kitchen	2,500.00
Additional story to lavatory at male workhouse	1,500.00
Steam cooking appliances	1,500.00
Building for colored women at almshouse	7,500.00
Hospital ward for white males	4,500.00
Painting and repairs to buildings	2,500.00
Finishing new barn	1,500.00
	\$81,500.00

For salaries:

one intendant	1,600.00
one visiting physician	1,080.00
one resident physician	480.00
one principal overseer	1,200.00
one clerk	720.00
one matron	600.00
one baker	450.00
six overseers, at \$600 each	3,600.00
one engineer	600.00
one first assistant engineer	400.00
one second assistant engineer	300.00
six watchmen, at \$365 each	2,190.00
two night watchmen, at \$365 each	730.90
one blacksmith	350.00
one tailor	300.00
two female keepers, at \$300 each	600.00
one hostler and ambulance driver	240.00
four cooks, at \$120 each	480.00
two cooks, at \$60 each	120.00
one trained nurse	420.00
six nurses, at \$180 each	1,080.00
Total	99,040.00

WASHINGTON, September 23, 1891.

GENTLEMEN: In my estimates for the fiscal year ending June 30, 1893, forwarded to you June 30 last, I estimated for 6 overseers at \$600, 6 watchmen at \$365, and 2 night watchmen at \$365 each. I beg leave to change the above as follows: 8 overseers at \$750, and 8 watchmen at \$500 per annum.

W. H. STOUTENBURGH,
Intendant, Washington Asylum.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

WASHINGTON ASYLUM HOSPITAL,
July 21, 1891.

SIR: I have the honor to report the operation of the Washington Asylum Hospital for the year ending June 30, 1891. The total number of patients treated is in excess of any previous year and the hospital is rapidly increasing in its sphere of usefulness. But that the hospital may keep abreast the progress of medical science, or even pretend to do so, or that it may give to the poorer classes anything like hospital accommodations, the requests I make concerning nurses and new hospital ward must be carefully considered. I am confident serious study of the conditions can reach but the same opinion I have offered.

The new surgical and obstetrical wards and dining room are great improvements, and when ready for occupancy will supply what has long been an urgent necessity.

The new surgical operating room, nearly ready for use, will, together with the new surgical wards, be a great step in advance in accommodations for those needing surgical treatment. The building used as white male ward is totally unfit for well people, much less sick men. During the past year the beds have had to be moved about from place to place to escape the rain coming through the roof.

This building, which was formerly a colored schoolhouse, is in a very unsanitary condition, and not worth repairing. It should be replaced by a new building, on the general plan of the latest-constructed wards of our hospital. We are sadly in need of nurses, and during a large part of the past year 1 nurse has had to care for 2 wards at a time, and you can readily understand that 1 nurse can not well care for 35 or 40 sick people.

In order that the nursing may be good more money must be expended for good nurses. We now have 7 wards, and 6 nurses besides the skilled nurse will be necessary to care for the sick. With a view to securing good nursing I ask for what is in my judgment a necessity to that end, that we be allowed for the hospital during the year ending June 30, 1893, 1 skilled nurse at \$420 per annum and 6 intelligent nurses at \$180 each per annum.

The number of insane people that in different ways come to this institution is noticeable. It has often been said the world is going crazy and statistics show that insanity is proportionately increasing.

During the year 41 insane people have been sent from here to St. Elizabeth's Asylum for the Insane after trial by the tedious jury process, that takes two to three weeks. During the year some of the most dangerous surgical operations and many minor ones have been performed. I take pleasure in commending Dr. Walsch, the resident physician, and the resident students for their uniform earnestness in and attendance to the hospital work. Other employés have been faithful and diligent in the performance of their duties.

I can not end this report without again recommending that the name of this hospital be changed to the Washington City Hospital (being the only municipal hospital in the city), and that the Central Dispensary be used as a feeder to it.

Very respectfully,

J. WESLEY BOVÉE, M. D.,
Visiting Physician.

Mr. W. H. STOUTENBURGH,
Intendant Washington Asylum.

Statistics of the hospital.

Patients remaining in hospital July 1, 1890	61
Patients admitted from June 30, 1890, to July 1, 1891.....	541
Births from June 30, 1890, to July 1, 1891	21
Total in hospital	623
Patients discharged from June 30, 1890, to July 1, 1891.....	477
Deaths from June 30, 1890, to July 1, 1891	82
Remaining in hospital July 1, 1891	64
Total	623
White males admitted.....	172
White females admitted.....	69
Colored males	179
Colored females	121
	541
Births:	
White, male	3
White, female	2
Colored, male	7
Colored, female	9
	21
	562
Daily average number in hospital.....	70

Nativity of Patients.

Nativity.	Number.	Nativity.	Number.
United States:		Foreign:	
California.....	1	Bohemia	1
Connecticut	5	Canada	2
District of Columbia.....	138	Denmark	1
Delaware	1	England	7
Georgia.....	3	France.....	1
Indiana.....	5	Germany	23
Maryland.....	107	Holland.....	1
Massachusetts.....	3	Ireland	60
Missouri.....	1	India	1
Mississippi.....	1	Malta.....	1
Montana.....	1	Mexico	1
Michigan.....	1	Nova Scotia.....	1
New York.....	18	Poland.....	1
North Carolina.....	10	Russia	1
New Jersey.....	2	Switzerland.....	2
Ohio.....	2	West Indies	1
Pennsylvania.....	7	Wales	1
Rhode Island	2		
South Carolina.....	3	Total	106
Virginia.....	175	Unknown.....	21
West Virginia	10		
Total	496	Grand total	623

Number of prescriptions compounded during the year, 18,124.

Causes of death.

Disease.	No.	Disease.	No.
Carcinoma	1	La grippe	1
Cerebral softening	2	Mitral regurgitation	12
Caries (sacrum)	1	Nephritis, chronic	7
Cirrhosis of liver	1	Tuberculosis	11
Diarrhea, chronic	3	Pneumonia	4
Erysipelas (face)	1	Pulmonary congestion	1
Endocarditis	1	Pulmonary abscess	1
Fracture of skull	1	Osteosarcoma (Superior maxilla)	1
Fevers	6	Senile debility	23
Fevers, typhoid	3	Sarcoma, lung	1
Fevers, intermittent	1	Synovitis, chronic	1
Gastric ulcer, chronic	1	Volvulus, intestinal	1
Gastroenteritis	1		
Hemorrhage, cerebral	7	Total	*88

*Of these 6 died in almshouse.

Surgical operations performed.

Operation.	No.	Operation.	No.
Amputation finger	1	Trachelorrhaphy	1
Amputation toes	1	Perinæorrhaphy, primary	3
Amputation leg	1	Perinæorrhaphy, secondary	1
Curetting for lupus	1	Removal of cancer from neck	1
Curetting uteri	4	Esophageal stricture, dilated	1
Injection of tuberculin for lupus	1	Intestinal volvulus, laparotomy for	1
Incision of abscesses	22	Incision of breast for double mammary ab-	
Incision for suppurating appendicitis	1	scess	2
Reduction of dislocations:		Circumcision	1
Subclavicular of humerus	1		
Both bones of forearm	1	Total	45

Diseases treated.

Disease.	No.	Disease.	No.
Asthma	3	Dysmenorrhea	1
Aneurism	1	Dislocations:	
Asphyxia	1	Humerus	1
Abscesses	2	Forearm, both bones	1
Abscesses, mammary	2	Unreduced ulnar	1
Alcoholism	60	Erysipelas	1
Appendicitis, suppurative	1	Endocarditis	2
Abortion	1	Epilepsy	6
Albuminuria	1	Elephantiasis	3
Bronchitis:		Endometritis, chronic	2
Acute	25	Fractures:	
Chronic	4	Metacarpus	1
Blindness	1	Ribs	2
Bubos	4	Skull	1
Conjunctivitis	1	Forearm	1
Cerebral softening	2	Femur	1
Cerebral hemorrhage	7	Frost bites	4
Constipation	1	Fibroids:	
Caries, sacrum	1	Uterus	2
Carcinoma:		Testicle	2
Neck	1	Furuncles	1
Face	2	Fistula in ano	2
Contusions	20	Fevers:	
Cataracts	2	Typhoid	7
Chancroid	1	Intermittent	15
Condylomata	1	Gonorrhea	1
Dematitis (phlegmonous)	1	Glycosuria	1
Dyspepsia	1	Hemiplegia	14
Diarrhea:		Hydrocele	2
Chronic	7	Hysteria	4
Acute	9	Hysterocatalepsy	1

Diseases treated—Continued.

Disease.	No.	Disease.	No.
Herpes iris	1	Poisoning by rhus tox.....	1
Hæmatocele	1	Phimosis	1
Hemorrhoids	2	Plumbism	2
Injury to spine.....	1	Pelvic cellulitis	1
Insanity	-	Rheumatism:	
Dementia:		Acute	6
Senile.....	12	Chronic.....	37
Paretic	2	Rubeola	4
Mania	6	Syphilis	19
Melancholia	2	Senile debility	26
Imbecility	1	Sinus of thigh (suppurat).....	1
Incontinence of urine.....	2	Sprain (ankle)	1
La grippe.....	7	Strictures:	
Lupus exedens.....	1	Esophagus.....	1
Locomotor ataxia.....	2	Urethra	4
Leucorrhœa	1	Sarcoma of lung	1
Lacerated perineum	1	Synovitis:	
Lacerated cervix.....	2	Syphilitic.....	1
Menopause	1	Chronic.....	3
Myalgia	5	Acute.....	1
Mitral regurgitation	22	Trichiasis	1
Mercurialism	1	Tinea tonsurans	2
Malingers	13	Tumor, abdominal	1
Menorrhagia.....	2	Tuberculosis.....	23
Morphia habit	2	Ulcers:	
Nephritis, chronic	8	Leg.....	28
Nymphomania.....	1	Gastric, chronic.....	1
Neuralgia.....	1	Uterine displacements:	
Osteosarcoma.....	1	Anteflexion.....	2
Orchitis	2	Retroflexion	2
Oedema penis and scrotum.....	1	Prolapse	1
Pregnancy.....	32	Varicose veins.....	1
Painful cicatrix.....	1	Volvulus, intestinal.....	1
Pneumonitis.....	9	Wounds:	
Pleuritis:		Punctured.....	1
Chronic.....	1	Incised	4
Acute	1	Whitlows.....	2
Pharyngitis	4	Not diagnosed	2
Paresis	2		

Number of patients sent to Government Hospital for Insane, 41.

I 2

THE REFORM SCHOOL OF THE DISTRICT OF COLUMBIA.

REFORM SCHOOL OF THE DISTRICT OF COLUMBIA,
OFFICE OF THE SUPERINTENDENT,
Washington, July 17, 1891.

GENTLEMEN: I have the honor to transmit herewith a detailed statement of receipts from farm and school for the fiscal year ending June 30, 1891.

I am, very respectfully, your obedient servant,
G. A. SHALLENBERGER,
Superintendent.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REFORM SCHOOL, D. C., *July 13, 1891.*

Detailed statement of receipts from farm and school for the fiscal year ending June 30, 1891.

July, 1890:		December, 1890:	
Farm products	\$48. 00	Farm products	\$52. 00
Paper-box industry	50. 00	Greenhouses	145. 94
Miscellaneous sources	10. 98	Paper-box industry	100. 00
	<u>109. 48</u>	Miscellaneous sources	3. 25
			<u>301. 19</u>
August, 1890:		Total, second quarter...	<u>654. 61</u>
Farm products	27. 90		
Paper-box industry	75. 00		
Miscellaneous sources	12. 65		
	<u>115. 55</u>		
September, 1890:		January, 1891:	
Farm products	40. 00	Farm products	44. 85
Box-factory industry	75. 00	Greenhouses	101. 42
Miscellaneous sources	22. 32	Paper-box industry	50. 00
	<u>137. 32</u>	Miscellaneous sources	2. 26
			<u>198. 53</u>
Total, first quarter	<u>362. 35</u>	February, 1891:	
October, 1890:		Farm products	1. 00
Farm products	52. 50	Greenhouses	99. 28
Greenhouses	12. 00	Paper-box industry	100. 00
Paper-box industry	75. 00	Miscellaneous sources	4. 90
Miscellaneous sources	1. 30		<u>205. 18</u>
	<u>140. 80</u>	March, 1891:	
November, 1890:		Farm products	3. 66
Farm products	30. 00	Greenhouses	109. 10
Greenhouses	101. 04	Paper-box industry	100. 00
Paper-box industry	75. 00	Miscellaneous sources	19. 83
Miscellaneous sources	6. 58		<u>232. 59</u>
	<u>212. 62</u>	Total, third quarter	<u>636. 30</u>

170 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Detailed statement of receipts from farm and school, etc.—Continued.

April, 1891:		June, 1891:	
Farm products	\$10.36	Farm products	\$185.98
Greenhouses	69.30	Greenhouses	9.85
Paper-box industry	150.00	Paper-box industry	300.00
Miscellaneous sources	7.46	Miscellaneous sources	12.92
	237.12		508.75
May, 1891:		Total, fourth quarter ...	1,064.38
Farm products	7.50		
Greenhouses	59.20		
Paper-box industry	250.00	Total receipts for the	
Miscellaneous sources	1.81	year	2,717.64
	318.51		

The above amounts have all been turned over, monthly, to Samuel W. Curriden, treasurer of the school.

Respectfully submitted.

G. A. SHALLENBERGER,
Superintendent.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REFORM SCHOOL OF THE DISTRICT OF COLUMBIA,
Washington, D. C., August 12, 1891.

GENTLEMEN: I have the honor to submit herewith, by direction of the board of trustees, estimates for the Reform School for the next fiscal year.

The estimates for "supplies" are the same as last year, although the population of the school has materially increased.

A small addition is asked for teachers. This is required by the increase in the number of inmates. We now have the same number of teachers as we had years ago, when the population was nearly 50 per cent less than it is at the present time. It is absolutely impossible with the increased number of inmates to do them justice without additional assistance of this character.

The school is now full to overflowing. It has repeatedly been my duty under the act of Congress to notify the courts that no more boys can be received. I have been appealed to by both of the judges of the police court to make room for boys who should be sent to the school instead of to the jail or workhouse; but I have been unable to comply with their requests for the reasons stated. We have asked, therefore, for another family building at an expense, including everything, not to exceed \$20,000, and it is earnestly urged by the board of trustees that you will recommend to Congress at its next session an appropriation for this object.

An appropriation of \$9,550 is also asked for a chapel building. The room now used for this purpose is entirely unsuited therefor, being small, with low ceiling, and badly ventilated, and will not accommodate the boys, with the many visitors we have on Sunday afternoons at our devotional services. Besides, the room now used for that purpose is used during the week for other purposes; and it would be more elevating to the boys to have a place dedicated solely to religious exercises. This

want has been long felt, but we have postponed asking for an appropriation in view of the fact that there were so many urgent wants for perhaps more necessary and immediate matters.

Five hundred dollars is also asked for fencing. No appropriation for this purpose has been made for many years, and most of the fencing is now worthless and must be replaced.

An appropriation is also asked for two additional water closets. Those on the premises are dilapidated and a disgrace to civilization.

The board respectfully asks that you will submit these estimates to Congress with your favorable recommendation.

Very respectfully,

A. J. FALLS,
President of the Board.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REFORM SCHOOL OF THE DISTRICT OF COLUMBIA,
Washington, D. C., August 13, 1891.

GENTLEMEN: Referring to my letter of yesterday, submitting estimates of appropriations for the Reform School, I omitted to include an item for grading and improvement of roadways and grounds.

I therefore have the honor to request that in submitting the estimates to Congress you will submit an item for this purpose of \$500.

Very respectfully,

A. J. FALLS,
President Board of Trustees.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

Estimates of appropriations for the expenses of the Reform School of the District of Columbia for the fiscal year ending June 30, 1893.

For salaries:

One superintendent	\$1, 800
One assistant superintendent	1, 000
Six teachers and assistant teachers	4, 050
One matron of school	600
Three matrons of families, each \$180	540
Three foremen of workshops	1, 980
One farmer	480
One engineer	396
One assistant engineer	300
One baker	360
One cook, one shoemaker, and one tailor, \$300 each	900
Two dining-room servants, one seamstress, and one chambermaid, \$144 each	576
One laundress	180
One florist	400
Watchmen, not exceeding six in number	1, 440
Secretary and treasurer of board of trustees	600

In all 15, 602

For support of inmates, including groceries, flour, feed, meats, dry goods, leather and shoes, gas, fuel, hardware, tableware, furniture, farm implements and seeds, harness and repairs to same, fertilizers, books, stationery, plumbing, painting and glazing, medicines, medical attendance, stock, fencing, repairs to buildings, improvement of roadways, and other necessary items, including compensation not exceeding \$1,000 for additional labor or services; and for transportation and other necessary expenses incident to securing suitable homes for discharged boys, not exceeding \$500, all under control of the Commissioners..... 26, 000

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For buildings and improvements:

One additional family building of brick, including heating apparatus, with connections, water supply, etc.....	\$20,000
For furnishing the same	1,200
One chapel, of brick and stone, including furnishing and heating.....	9,550
For fencing the grounds	500
For two brick water closets, at \$1,200 each	2,400
In all.....	33,650
Grading and improving roadways and grounds	500
	34,150

REPORT OF THE BOARD OF TRUSTEES OF THE REFORM SCHOOL.

REFORM SCHOOL OF THE DISTRICT OF COLUMBIA,

Washington, D. C., October 1, 1891.

GENTLEMEN: As required by law, I have the honor to submit herewith the Twenty-second Annual Report of the Board of Trustees of the Reform School of the District of Columbia.

Twenty-two years ago the school was organized, and from the date of its organization to the end of the last fiscal year there had been received 1,601 boys.

At the commencement of the last fiscal year there were 198 boys in the school, a larger number than in any previous year.

There were received during the fiscal year 98 boys. Of these, 5 were committed by the criminal court of this District, 59 by the police courts, 10 by the United States courts outside of the District of Columbia, and 24 by the president of the board.

Eighty-nine were received on first commitment, and 9 on second commitment.

The average age of boys committed to the school during the year was 13½ years.

The total population during the year was 296. The maximum number during the year was 208 and the minimum 188, making an average of 198 for the year; being a larger average population than the school has ever before had.

Since the organization of the school but 10 deaths have occurred, being less than three-fourths of 1 per cent.

For further statistics, reference is respectfully made to the report of the superintendent, hereto annexed.

Every care and attention are given by the officers of the school and the attending physician to the proper and necessary sanitary precautions, and no death from disease has occurred during the year. Unfortunately, however, one boy was attacked by a fellow inmate and cut with a knife, which resulted in his death.

Every attention and the best medical treatment was given to the boy, who was, after consultation with other physicians, removed by Dr. Wells to Providence Hospital, where he received from the hospital staff of that institution all due and necessary attention, but after lingering a short time he died.

The boy who was guilty of his death was sent to the jail, indicted by the grand jury, and finally sentenced for a term of years to the penitentiary at Albany, N. Y.

The report of the physician of the school, Dr. Charles A. Wells, which accompanies this report, gives a full and detailed statement of this case, to which your attention is invited; and also your attention is invited to the various suggestions and recommendations therein made.

During the year 90 boys were discharged. Of these, 80 were discharged by order of the Board of Trustees on account of the boys having earned their discharge by good conduct; 5 were discharged from the school by change of sentence by the court; 4 escaped and are still absent from the school, and 1 boy died.

Estimates of appropriations for the next fiscal year have been submitted to you and to the honorable Attorney-General, as follows:

For salaries:

One superintendent.....	\$1,800
One assistant superintendent.....	1,000
Six teachers and assistant teachers.....	4,050
One matron of school.....	600
Three matrons of families, \$180 each.....	540
Three foremen of workshops.....	1,980
One farmer.....	480
One engineer.....	396
One assistant engineer.....	300
One baker.....	360
One cook, 1 shoemaker, and 1 tailor, \$300 each.....	900
Two dining-room servants, 1 seamstress, and 1 chambermaid, \$144 each.....	576
One laundress.....	180
One florist.....	400
One secretary and treasurer of Board of Trustees.....	600

In all..... 15,602

For support of inmates, including groceries, flour, feed, meats, dry goods, leather and shoes, gas, fuel, hardware, tableware, furniture, farm implements and seeds, harness and repairs to same, fertilizers, books, stationery, plumbing, painting and glazing, medicines, medical attendance, stock, fencing, repairs to buildings, improvement of roadways, and other necessary items, including compensation not exceeding \$1,000 for additional labor or services, and for transportation and other necessary expenses incidental to securing suitable homes for discharged boys not exceeding \$500; in all, \$26,000.

For buildings and improvements:

One additional family building, of brick, including heating apparatus, with connections, water supply, etc.....	\$20,000
For furnishing the same.....	1,200
One chapel, of brick and stone, including furnishing and heating.....	9,550
For fencing the grounds.....	500
For 2 brick water-closets, at \$1,200 each.....	2,400
Grading and improvement of roadways and grounds.....	500

In all..... 34,150

A slight addition has been asked for the salaries of the superintendent and the assistant superintendent.

Your attention was invited in my last annual report to the justice of making this small increase, but Congress failed to take favorable action in the premises. It is submitted again, with the hope that it will now meet with the approval of Congress, and that these officers will receive this still inadequate increase to their compensation.

Additional teachers have been asked for in the estimates of appropriations. As aforesaid, the population of the school is larger than ever before, and to give the boys proper care and education requires more teachers; and it is earnestly hoped, for the welfare of the school and its proper management, that the Board of Trustees may be authorized by additional appropriations to employ the necessary teachers.

With these exceptions the estimates for salaries are the same as for the past several years.

Although the population of the school is much larger than ever before, nothing in addition to former appropriations for "support of inmates" is asked. With the amount appropriated, in addition to the farm products of the school, no increased appropriation for this purpose is asked or will be required.

The school is now crowded beyond its capacity, and it has repeatedly been my duty, under the act of Congress, to notify the courts of the District of Columbia that no more boys could be received.

I have often been appealed to by the judges of the courts to make room for boys who should be sent to the school instead of to the jail or workhouse, but have been unable to comply with their requests.

In the estimates submitted, the trustees have, therefore, asked for another family building, at an expense of \$20,000, and it is earnestly urged that this appropriation be made by Congress at its coming session.

This will be absolutely necessary in order that these boys who have taken their first downward step in life, instead of being relegated to the pernicious influences of the jail or workhouse, with associates hardened in crime, may be sent to the school, where, under kind treatment and refining influences, they may be diverted from the hopeless career that may be opening before them.

It must be taken into consideration that the population of the District of Columbia is rapidly increasing, year by year; and unfortunately this increase brings with it, in the same ratio, its share of crime and of wayward and incorrigible boys who must be provided for in our school if they are to be reclaimed and made useful and honorable citizens.

A want which has been felt for many years is that of a proper place for worship. At present the boys are assembled, with their teachers, on the Sabbath day, in a room in the main building, entirely too small and unfitted for the purpose, the ceiling being low, and the room badly ventilated, and altogether unsuitable. An appropriation of \$9,550 is asked for the building of a chapel; and money could not be better expended than for this purpose. Besides, the hospital quarters are immediately over this room; and frequently, when boys are ill, the Sunday services have to be dispensed with. Besides, the room so used is used during the week as a schoolroom and for other purposes; and it would be more elevating to the boys to have a place dedicated solely to religious exercises. The amount asked is small in comparison with the great amount of good that would be done by having a building set apart entirely for religious services.

Five hundred dollars for fencing, and a like amount for draining and grading is asked. The amount is small but very necessary.

An appropriation is also asked for additional water-closets. This appropriation has been asked for for the past several years, without success. At present the places used for these purposes are, in spite of all efforts to keep them in a sanitary condition, a disgrace to decency and civilization, to say nothing of the health and comfort of the school; and should be replaced at once by proper structures.

For the service of the last fiscal year there was appropriated as follows:

Appropriation for salaries	\$12, 866. 41	
Balance unexpended		\$94. 74
Appropriation for support	26, 000. 00	
Balance unexpended		41. 87
Appropriation for improvement of grounds	300. 00	
Balance unexpended		1. 43
Appropriation for painting buildings	500. 00	
Total amount unexpended		138. 04

The following are the receipts of the school for current expenses and pay-roll account and a summary of the disbursements during the year:

Received:

Appropriations for pay roll.....	\$12,866.41
Appropriation for current expenses.....	26,000.00
From Department of Justice refund for support of inmates.....	1,520.17
From Jay Cooke & Co., final settlement.....	322.08
Total.....	40,708.66

Disbursed:

Pay roll	\$12,171.67
Compensation	875.19
Secretary and treasurer	600.00
Groceries, etc.....	5,664.98
Flour and feed.....	3,478.65
Fresh meat.....	2,155.19
Dry goods, clothing, etc.....	2,762.60
Leather and shoes.....	631.75
Gas and fuel.....	3,344.04
Hardware, tableware, etc.....	479.55
Seeds, fertilizers, harness, tools, etc.....	1,445.53
Stationery, books, and printing.....	404.49
Medicine and medical attendance.....	799.55
Sundries.....	1,406.01
Furniture.....	684.45
Repairs.....	3,268.40
Live stock.....	400.00
Total	40,572.05

Leaving an unexpended balance of..... 136.61

The superintendent received and turned over to the treasurer of the school during the year the sum of \$2,717.04; which has been deposited in the Treasury of the United States, one-half to the credit of the District of Columbia, and the other half to the credit of the United States as required by law.

Your attention is respectfully invited to the report of the treasurer herewith.

The farm during the past year has yielded more bountiful crops than ever before. An abundance of fruits and vegetables of all kinds has been raised in sufficient quantities to more than provide for the wants of the school.

Attention is again invited to the necessity of some legislation giving the trustees of the school control over boys who have been discharged from the school during their minority.

Such authority, I am informed, is lodged with the officers of similar institutions throughout the United States.

The attention of Congress has been heretofore invited to this matter, and a bill was introduced which passed the House of Representatives, but, for want of time or other causes, failed to pass the Senate and become a law.

A similar bill will be introduced during the coming session; and the trustees respectfully ask that you will, at the proper time, recommend to Congress its passage.

But few changes have been made in the employés of the school.

As a rule they have all discharged their difficult, delicate, and trying duties faithfully and well.

Only those experienced in such matters can know how arduous, responsible, and difficult are the duties of the officers of an institution of this kind. Their work is never done. From early in the morning till late at night, and frequently all through the night, they are on duty,

with their numerous cares and responsibilities, and for their zeal and fidelity they are commended by the trustees.

Too much praise can not be given to Mrs. Shallenberger, our worthy matron, for her considerate, kind, and motherly treatment of the boys, large and small, white and colored, especially when sick and confined to their beds.

Always kind, gentle, and filled with an anxious care and watchful tenderness over her sick boys, when the occasion arises, with a mother's love and a Christian sympathy, she nobly seconds the skill of the attending physician, and when the messenger of death draws nigh she points the departing spirit to its Maker, and commends the soul to Him who gave it.

It is with profound feeling that the writer bears this testimony to Mrs. Shallenberger.

Very respectfully,

A. J. FALLS,
President of the Board of Trustees.

The Hon. COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REPORT OF THE SUPERINTENDENT.

REFORM SCHOOL OF THE DISTRICT OF COLUMBIA, October 1, 1891.

GENTLEMEN: I have the honor to submit herewith my annual report for the fiscal year ending June 30, 1891:

Total number of boys received since opening	1,601
Total number of deaths since opening	10
Rate of mortality less than three-fourths of 1 per cent.	
Average age of boys received since opening	13
Number of boys in institution June 30, 1890	198
Minimum time for boys remaining under the rules	2
Possible reduction of this time for perfect conduct	5
Received during the year as follows, viz:	
From commitment by supreme court	5
From commitment by police court	59
From commitment by United States circuit courts	10
From commitment by president of the board	24
Total	98
Total population during the year	296
Number received on first commitment	89
Number received on second commitment	9
Total	98
Average age of boys received during the year	13.5
Maximum number during the year	208
Minimum number during the year	188
Average number during the year	198
Number of boys discharged during the year:	
By order of the board of trustees	80
By change of sentence of police court	5
By escape and still absent	4
By death	1
Total	90
Total number remaining June 30, 1891	206
Average time served by boys discharged during the year	2

Causes of commitments during the year:

Incorrigibility.....	36
Larceny.....	33
Vagrancy.....	17
Assault.....	1
Housebreaking.....	3
Violating United States mails.....	1
Robbing mails.....	5
Manslaughter.....	1
Horse stealing.....	1
Total.....	<u>98</u>

Religious training of boys prior to commitment:

Baptist.....	31
Catholic.....	25
Episcopalian.....	5
Methodist.....	28
Presbyterian.....	3
Congregationalist.....	1
Lutheran.....	1
Hebrew.....	1
No early religious training.....	3
Total.....	<u>98</u>

Parental relations of boys received during the year:

Number having both parents living.....	55
Number having lost father by death.....	24
Number having lost mother by death.....	10
Number having lost both parents by death.....	8
Number having parents living in separation.....	12
Number having stepfathers.....	3
Number having stepmothers.....	4

Educational grade when received:

Number who did not know alphabet.....	12
Number who knew alphabet only.....	10
Number who could spell in one syllable.....	10
Number who could read primary lessons.....	28
Number who could read tolerably well.....	24
Number who could read well.....	14
Total.....	<u>98</u>

Number who could not write.....	47
Number who could write name only.....	30
Number who could write tolerably well.....	13
Number who could write well.....	8
Total.....	<u>98</u>

FINANCIAL STATEMENT.

The superintendent has received from various sources during the year, and turned the same over monthly to Samuel W. Curriden, treasurer of the school, who has covered the same into the United States Treasury to the credit of the United States and the District of Columbia jointly, as follows, viz:

Cash received from paper-box factory.....	\$1,400.00
Cash received from sales of surplus farm products.....	504.25
Cash received from greenhouses.....	707.13
Cash received from miscellaneous sources.....	106.26
Total.....	<u>2,717.64</u>

Under Divine Providence, the school has closed another prosperous year. This simply means that in every separate department the work

has progressed to the satisfaction of those legally appointed to direct and control its affairs.

The superintendent, as required by long-established custom, has made a written report monthly to the board of trustees. Thus every important transaction has been brought to their knowledge officially at their stated monthly meetings for business.

In addition to this means of receiving information, the board is represented every month by two of its own members, duly appointed by its president, to visit the institution, examine the work as it progresses, direct all necessary changes, inspect the buildings and grounds with special reference to their sanitary condition, and make a record of the same in a book kept for such purposes.

This, as will be seen, not only relieves the chief executive officer from an otherwise cumulative responsibility, but renders it almost impossible for either himself or his assistants to err materially in a just administration of the rules, or fail for any length of time to execute the will of those who exercise supreme control.

The average number of boys received and cared for has been greater than in any former year. The quantity of all supplies required for maintenance has therefore been in a ratio to meet this increased population; while the standard as to quality has been fully maintained throughout the year.

In addition to this, many necessary repairs to buildings have been made, and requisite changes in grades, to secure new roadways through the farm and improve the drainage of the school grounds.

No additional appropriations were provided to meet these necessary improvements. The average moneyed receipts from the sales of surplus farm products, and from net gains in the several workshops, were all covered into the United States Treasury. This has resulted in a corresponding reduction in the per capita cost of maintenance, and will be accepted as evidence, to justify our previous claim, that another year of at least financial prosperity has been added to our school life.

But we claim much more than this. Nearly 100 boys have received their honorable discharge within the year, and we know certainly that a large proportion of the entire number have been greatly benefited, and many of them have been wholly reclaimed from a life of idleness, if not of crime. All of them have been taught during their attendance upon the school sessions a knowledge of the elementary branches, while the more capable among them have been advanced to the higher grades, taking the District public schools as the standard. Under the influence of a mild but positive discipline, they have been induced to accept the new and better conditions, until habits have been formed from which ordinary temptations fail to separate them.

What figures may indicate the exact number, or what proportion of those discharged have been permanently reclaimed, we have no present means of determining. Although frequent applications have been made to the higher authorities, no legal provision has yet been secured for the care and supervision during minority of our discharged boys. With most of them this is an important crisis in their lives—often the turning point for good or evil, and the same wise legislation, that has so generously provided everything else, should not hesitate to go a step further and thus make comparatively secure and lasting a reformation often so full of promise and so fraught with the elements of safety both to the individual and the State.

There have been but few changes during the year in our daily routine of school life. Most of the smaller boys are still employed in the several

shops when not attending the regular school sessions. The greater part of the clothing they wear, summer and winter, is made by their own hands under the instruction of a competent instructor. The food they consume is daily prepared by other but similar hands, under the training and assistance of a competent cook. The same general conditions prevail in every separate department of the school; and this includes all necessary domestic labor, both in the main and family buildings.

Our paper-box industry has been growing in importance and enlarging its net income every year since it was first established. It now furnishes remunerative labor for a large number of boys. The practical knowledge they acquire in learning this trade or calling will be of much benefit to many of them after they leave the school, as the demand for this class of labor is constantly increasing.

The farm, however, with its fine fruit and vegetable gardens, must always remain, as it ever has been, our favorite workshop. This year it has added more than its average quota to the general prosperity. There has been an abundant yield of all field and garden crops, including many varieties of fruits for both summer and winter use. From these sources our tables have been supplied with all the best vegetable products in their season. Our older boys still perform the greater portion of the farm work, and their dining room has given daily evidence throughout the year of the quantity and variety of all these wholesome food products.

Regular school sessions have been held, as customary, in each of the family schoolrooms during the winter months. Six sessions, of four hours each, are held daily, and the teachers in charge are also on duty as officers to assist with the general work of the institution. Our purpose is, first, to give every boy the benefit of a common-school education. If they are disposed to profit by their opportunities, this will be sufficient to prepare them for citizenship and for the ordinary business of life. In one school grade, in "B" family, a number of the higher branches are taught, including history, algebra, geometry, and mechanical drawing.

The general health has been exceptionally good throughout the year. We have but one death to report, which occurred on the 2d day of March last. Special mention of this case will be found in the report of the attending physician, Dr. Charles A. Wells. The best disinfectants have been freely and systematically used, especially during the hot summer months, and by such means our buildings and grounds have been kept comparatively free from malarial and fever-producing agencies.

In addition to our usual appropriations for subsistence, Congress very generously made provision for several much-needed improvements. They consisted of important additions to our steam-heating plant, new steam-heating equipment for "A" family building, and a new brick boiler house. These several improvements are now nearing completion and will be entirely finished during the present month, and at a cost not to exceed the several sums appropriated for each.

I most earnestly request favorable consideration of our needs for the coming fiscal year. They have been carefully itemized and estimates for the same forwarded through the proper official channels. They will doubtless appear also in the body of your present annual report to the honorable the Attorney-General and the Commissioners of the District of Columbia. I will not, therefore, name them in detail, but will speak for them, and of their great importance to the school, as a unit. We need everything for which a claim has been presented and every dollar

asked for in your estimates, which I trust you will be able to secure by appropriation from the Congress at its coming session.

Our national holidays were all duly observed in their regular order. There is nothing, perhaps, in which we all so thoroughly and cordially unite as in the celebration of these memorial days. "Fourth of July" and "Merry Christmas" still take precedence of all others. This is as it should be, for each awakens memories peculiarly its own, and each serves to remind us in turn of our national liberties, both civil and religious.

The time of our "annual entertainment" was neither overlooked nor forgotten by any good friend of the school at all familiar with the rôle presented by the boys on these pleasant occasions. Hence, the evening of February 27 brought together, as usual, a large and appreciative audience. Notably among these were members of the board of trustees and their families, with many others prominent in the social and public life of the city and District, as their invited guests.

Our boys were never more willing and certainly never better prepared to give our visiting friends "the worth of their money." Modestly estimating their true value, and accepting as authority the hearty expressions of applause bestowed upon each separate performance, our youthful actors on this occasion must be credited with a full measure of success.

The programme was bright and varied throughout, and included a number of musical diversions, given at intervals, by the entire school.

Mr. William K. Cohen, musical instructor, was in charge of these specialties, rendering valuable aid, and greatly assisting in all that contributed to the enjoyment of those present.

Religious services were held regularly, with few exceptions, every Sabbath afternoon at 3 o'clock, throughout the year. These services are in no sense sectarian, or exclusive, as they have been conducted alternately by ministers of the gospel and others connected with the various denominations prominent in the city and immediate neighborhood. All are cordially invited to be present on such occasions, and unite with us in these devotional exercises. For timely aid on all such occasions we are greatly indebted to these good friends of the school, and take this opportunity of expressing to them personally our sincere acknowledgments.

A Sabbath school session has also been held regularly in each family schoolroom at half-past 10 o'clock every Sabbath morning. The International Bible Lessons, as published by the American Sunday School Union, have been in use with us for many years; and our service of song in all our devotional exercises is usually taken from the late editions of the Gospel Hymns.

On the fourth Sabbath morning of each month, the Rev. Father Russell, of Hyattsville, Md., conducts a religious service and administers the sacraments to boys connected with the communion of the Catholic Church. Instructions are also given to these boys every Sabbath evening, by teachers sent from the city for such purpose.

We have received during the year, from various sources, valuable contributions to our school library, especially in magazines and weekly papers. These miscellaneous publications have been warmly welcomed by the boys, as they have furnished the means for passing pleasantly and profitably many of their shorter intervals of leisure. We have also received monthly, from the Dead-Letter branch of the General Post Office, a contribution of choice reading matter, including odd numbers of all the leading magazines, illustrated papers, picture cards, etc.

In addition to these generous donations, we receive also from the publishers, direct, quite a number of copies each of *The Youth's Companion*, *Harper's Young People*, and the *School Review*, together with a variety of papers adapted to the wants of our younger boys.

Weekly and monthly papers, published by schools similar to our own, reach us promptly and receive a hearty welcome, as they come from our good friends in charge of the House of Refuge, Cincinnati, Ohio; Reform School for Boys, Jamesburg, N. J.; House of Reformation, Deer Island, Mass.; Socanosset School, Howard, R. I., and the Lyman School for Boys, Westboro, Mass.

Few changes have been made or required in our official force, and these only in the interest of the school or in case of voluntary resignation. Much credit is due my worthy assistants and associates for whatever success may have attended our united efforts during the past official year.

In closing, permit me to thank you, gentlemen, members of the board of trustees, for your continued confidence in my efforts to serve you in all that concerns the work and welfare of the institution.

Respectfully submitted.

G. A. SHALLENBERGER,
Superintendent.

The BOARD OF TRUSTEES,
Reform School of the District of Columbia.

REPORT OF THE TREASURER.

THE REFORM SCHOOL OF THE DISTRICT OF COLUMBIA,
Washington, D. C., October 10, 1891.

SIRS: I have the honor to submit herewith my report as treasurer of the Reform School for the fiscal year ended June 30 last.

Received appropriation for salaries	\$12,866.41
Expended on account	12,771.67

Leaving an unexpended balance of	\$94.74
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Received:

Appropriation for support	\$26,000.00
Department of Justice refund	1,520.17
Settlement with Jay Cooke & Co.'s estate	322.08

	27,842.25
Expended on account	27,800.38

Leaving an unexpended balance of	41.87
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Received appropriation for improvement of grounds	300.00
Expended on account	298.57

Leaving an unexpended balance of	1.43
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Received appropriation for painting buildings	500.00
Expended on account	500.00

Total amount unexpended	138.04
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I have also received from the superintendent of the school during the year receipts from farm and workshops, \$2,717.64. In accordance with the act of Congress approved February 25, 1885, I have paid the same into the Treasury of the United States, to the credit of the United States and the District of Columbia in equal parts.

Very respectfully and truly, yours,

SAMUEL W. CURRIDEN,
Treasurer.

The BOARD OF TRUSTEES.

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Statement of disbursements on account of current expenses, pay roll, etc., of the Reform School of the District of Columbia, for the fiscal year ended June 30, 1891.

Date.	Name.	For what expended.	Amount.
July 31, 1890	Hume & Co.	Groceries	\$96.67
	Beall & Baker	do	84.40
	Kingsley Bros. Creamery Co	Butter	38.40
	Jas. F. Oyster	do	33.06
	The Hygienic Ice Co	Ice	45.75
	American Ice Co	do	6.60
	W. M. Galt & Co	Flour, etc.	263.66
	G. F. Swift & Co	Meat	180.54
	Woodward & Lothrop	Dry goods	157.93
	Thos. Henry & Sons	do	49.88
	Guy Curran & Co	do	10.63
	B. S. Behrend & Son	do	5.00
	Eiseman Bros	Clothing	24.50
	Augustus Thomas & Co	Hats	18.00
	B. Salomon	do	4.13
	Robt. Cohen	Shoes	33.60
	W. L. King & Bro	Shoe findings	16.68
	Washington Gaslight Co	Gas	37.50
	F. P. May & Co	Hardware	3.65
	M. W. Beveridge	Tableware	16.98
	K. Kneessi & Son	Harness	24.50
	Bex & Heimsch	Wagon repairs	23.35
	Oppie Anderson	Blacksmithing	11.50
	Columbia Railway Co	Manure	35.00
	Jno. A. Baker	Seeds, etc.	6.16
	Wm. Ballantyne & Son	Stationery	18.68
	Thos. W. Smith	Lumber	23.34
	Geo. Ryneal, jr.	Paint	10.75
	Geo. G. Hansell	Scraping walls	10.00
	Tschiffely & Evans	Medicine	21.14
	Geo. I. Mueller	Sundries	9.40
	Geo. E. McElfresh	Printing	9.75
	J. E. Berry	Conveyance	8.00
	Chas. Beck	Cutting machine	25.00
	F. L. Kilborne	Veterinary services	12.00
	G. A. Shallenberger, superintendent	Sundries	26.17
	William H. King	Plants	48.00
	G. A. Shallenberger, superintendent	Pay roll, July	613.00
	do	do	241.67
	do	do	90.00
	John Stevens	Compensation	22.50
	Lewis Raison	do	15.60
	Howard Stratton	do	18.00
	Louisa Johnson	do	7.50
	C. H. Garden & Co	Hats	13.30
Aug. 31, 1890	G. A. Shallenberger, superintendent	Pay roll, August	613.00
	do	do	290.00
	do	do	90.00
	John Stevens	Compensation	22.50
	H. Streeton	do	18.00
	R. H. Stephens	do	15.00
	Bessy Robinson	do	7.50
	Andrew Barbour	Repairs	76.00
	G. A. Shallenberger, superintendent	Pay roll, September	613.00
	do	do	290.00
Sept. 30, 1890	do	do	105.00
	do	Compensation	73.00
	S. W. Curriden	Services to September 30	150.00
	W. M. Galt & Co	Flour, etc.	265.40
	Browning & Middleton	Groceries	164.00
	G. F. Swift & Co	Meat	144.85
	Beall & Baker	Groceries	61.70
	Hume & Co	do	38.76
	The Hygienic Ice Co	Ice	44.18
	Woodward & Lothrop	Dry goods	206.00
	Guy Curran & Co	Sundries	22.31
	Augustus Thomas & Co	Caps	27.00
	Charles A. Wells	Medical attendance	80.00
	Tschiffely & Evans	Medicines	5.25
	Charles Fischer	Truss	2.50
	George E. McElfresh	Printing	4.50
	Washington Gaslight Co	Gas	53.00
	Johnson Bros	Coal	66.64
	Geo. Ryneal & Co	Paint	11.75
	Notley Anderson	Repairs to main building	32.00
	do	Repairs to laundry	81.00
	J. T. Walker's Sons	Cement	13.50
	Robt. Leitch & Sons	Pipe, etc	8.09
	John A. Baker	Farm tools	8.65

184 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Statement of disbursements of current expenses of the Reform School, etc.—Continued.

Date.	Name.	For what expended.	Amount.
Oct. 30, 1890	Columbia Railway Co	Manure	\$35. 00
	Oppie Anderson	Blacksmithing	11. 75
	Edw. S. Schmid	Tobacco stems	4. 50
	J. D. Free jr.	Stationery	12. 83
	Wm. Ballantyne & Son	Books, etc	39. 93
	J. C. Addison	Stationery	7. 61
	Tschiffley & Evans	Medicine	14. 35
	Charles A. Wells	Medical attendance	76. 00
	John A. McCormick	Veterinary services	20. 50
	B. I. Behrend & Son	Sundries	20. 86
	G. A. Shallenberger, superintendent	do	29. 93
	J. E. Berry	Conveyance	24. 00
	Geo. Ryneal jr.	Paint	13. 88
	Geo. N. Holland	Lime, etc	7. 30
	Hutchinson Bros	Houseware	5. 22
	Bex & Heunsch	Wagon repairs	38. 00
	G. A. Shallenberger, superintendent	Pay roll, November	613. 00
	do	do	290. 00
	do	do	92. 50
	Allen R. Adams	Compensation	43. 50
Nov. 29, 1890	W. K. Cohen	do	25. 00
	Jno. Stearns	do	22. 50
	H. Streetor	do	20. 00
	Birdie Crofoot	do	15. 00
	G. A. Shallenberger, superintendant	Expenses to Philadelphia	10. 65
	Geo. H. Sanborn & Sons	Cutters	38. 50
	N. Anderson	Repairs	36. 00
	Beall & Baker	Groceries	99. 41
	Hume & Co	do	59. 83
	Browning & Middleton	do	206. 26
	Jas. F. Oyster	Butter	96. 28
	The Hygienic Ice Co.	Ice	22. 75
	W. M. Galt & Co	Flour, etc	297. 65
	G. F. Swift & Co	Meat	135. 08
	J. J. Hogan	Oysters	12. 25
	Woodward & Lothrop	Dry goods	123. 67
	Lansburgh & Bro	do	155. 98
	Guy Curran & Co	Sundries	13. 21
	B. I. Behrend & Son	do	7. 15
	Aug. Thomas & Co.	Cloth	61. 20
	Eiseman Bros	Clothing	31. 35
	Jas. Auerbach	Hats	6. 93
	Robt. Cohen	Shoes	21. 90
	W. L. King & Bro	Shoe findings	35. 85
	Washington Gaslight Co	Gas	89. 25
	F. P. May & Co	Hardware	5. 35
	M. W. Beveridge	Houseware	41. 79
	Columbia Railway Co	Manure	35. 00
	Oppie Anderson	Blacksmithing	11. 25
	Wm. Ballantyne & Sons	Stationery	53. 09
	Tschiffley & Evans	Medicines	15. 50
	Jno. A. McCormick	Veterinary services	28. 00
	M. Dorsch	Sauerkraut	5. 00
	M. Silverberg & Co	Sundries	10. 23
	Geo. I. Mueller	do	8. 45
	S. S. Shedd & Bro	Gas pendants	4. 50
	J. E. Berry	Conveyance	36. 00
	W. H. Houghton & Co.	Matting, etc	17. 72
	Chas. J. Fanning	Slating	31. 05
	Ward & Cunningham	Plumbing	166. 12
	Thos. W. Smith	Lumber	43. 42
	Geo. Ryneal, jr	Paint, etc	20. 88
	G. A. Shallenberger, superintendent	Sundries	15. 17
	Allen R. Adams	Services	7. 25
Dec. 31, 1890	G. A. Shallenbarger, superintendent	Pay roll, December	613. 00
	do	do	290. 00
	do	do	92. 50
	do	Compensation	67. 50
	Browning & Middleton	Sundries	22. 75
	Beall & Baker	Groceries	321. 13
	C. Denekas	do	161. 66
	Jas. F. Oyster	Yeast	35. 35
	W. M. Galt & Co	Butter	65. 78
	G. F. Swift & Co	Flour, etc	298. 60
	J. J. Hogan	Meat	164. 83
	Woodward & Lothrop	Oysters	24. 00
	Lansburgh & Bro	Dry goods	105. 00
	Eiseman Bros	do	10. 19
	Aug. Thomas & Co	Clothing	33. 25
	Guy Curran & Co	do	85. 75
	do	Sundries	14. 84

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 185

Statement of disbursements of current expenses of the Reform School, etc.—Continued.

Date.	Name.	For what expended.	Amount.
Dec. 31, 1890	B. I. Behrend & Son.....	Sundries	\$21. 80
	W. L. King & Bro.....	Leather.....	11. 40
	Washington Gaslight Co.....	Gas.....	108. 00
	L. H. Schneider's Sons.....	Hardware.....	13. 85
	F. P. May & Co.....	do.....	5. 25
	M. W. Beveridge.....	Tableware.....	23. 65
	B. F. Guy & Co.....	Houseware.....	3. 35
	Columbia Railway Co.....	Manure.....	35. 00
	Oppie Anderson.....	Blacksmithing.....	26. 40
	O'Neil Bros.....	do.....	16. 25
	Geo. McDermott & Bro.....	Repairs to carriage.....	51. 50
	K. Kneessi's Sons.....	Harness.....	46. 10
	Wm. Ballantyne & Son.....	Books.....	5. 00
	Geo. E. McElfresh.....	Stationery.....	5. 75
	Tschiffely & Evans.....	Medicine.....	16. 40
	Chas. A. Wells.....	Medical attendance.....	78. 00
	B. P. Murray.....	Entertainment.....	10. 00
	Geo. I. Mueller.....	Sundries.....	25. 37
	C. & P. Telephone Co.....	Rental to December 31.....	62. 50
	J. E. Berry.....	Conveyance.....	27. 00
	Wash. B. Williams.....	Furniture.....	115. 67
	Thos. W. Smith.....	Lumber.....	12. 25
	Geo. Ryneal, jr.....	Paint.....	27. 22
	J. T. Walker's Sons.....	Cement.....	23. 00
	Geo. N. Holland.....	Lime.....	4. 15
	Louis Baer.....	Repairs.....	5. 34
	S. W. Curriden.....	Services to December 31.....	150. 00
Jan. 31, 1891	N. Auth.....	Meat.....	7. 50
	A. B. Brummel, agent.....	Repairs.....	7. 50
	Chas. H. Dickson, agent.....	Rental gas governor.....	30. 00
	G. A. Shallenberger, superintendent.....	Pay roll, January.....	613. 00
	do.....	do.....	290. 00
	do.....	do.....	92. 50
	do.....	Compensation.....	80. 00
	A. R. Adams.....	do.....	7. 00
	G. A. Shallenberger, superintendent.....	Sundries.....	32. 77
	Beall & Baker.....	Groceries.....	89. 43
	Hume & Co.....	do.....	107. 05
	Browning & Middleton.....	do.....	193. 44
	Jan. F. Oyster.....	Butter.....	53. 24
	W. M. Galt & Co.....	Flour, etc.....	301. 76
	G. F. Swift & Co.....	Meat.....	161. 58
	J. J. Hogan.....	Oysters.....	15. 00
	Lansburgh & Bro.....	Dry goods.....	45. 27
	Woodward & Lothrop.....	do.....	89. 88
	Eiseman Bros.....	Clothing.....	21. 50
	Guy, Curran & Co.....	Sundries.....	31. 55
	Robt. Cohen.....	Shoes.....	31. 50
	W. L. King & Bro.....	Shoe findings.....	23. 29
	Washington Gas Light Co.....	Gas.....	86. 00
	F. P. May & Co.....	Hardware.....	3. 50
	M. W. Beveridge.....	Tableware.....	20. 75
	Edw. S. Schmid.....	Seeds, etc.....	3. 25
	L. H. Schneider's Son.....	Manure forks.....	6. 00
	Columbia Railway Co.....	Manure.....	35. 00
	Oppie Anderson.....	Blacksmithing.....	6. 75
	Bex & Heunsch.....	Repairs.....	23. 60
	J. C. Addison.....	Stationery.....	13. 34
	Wm. Ballantyne & Sons.....	do.....	55. 59
	Geo. E. McElfresh.....	Printing.....	9. 25
	Tschiffely & Evans.....	Medicine.....	18. 45
	Jno. A. McCormick.....	Veterinary services.....	7. 50
	J. E. Berry.....	Conveyance.....	20. 00
	Notley Anderson.....	Carpentering.....	48. 00
	Chas. J. Fanning.....	Roofing.....	54. 80
	Danl. Hannan.....	Spigots.....	4. 25
	Robt. Leitch & Sons.....	Pipe fittings.....	8. 52
	Thos. W. Smith.....	Lumber.....	33. 98
	J. T. Walker's Sons.....	Cement.....	28. 00
	Geo. Ryneal, jr.....	Paint.....	7. 75
Feb. 28, 1891	A. J. Joyce's Sons.....	Repairs to buggy.....	18. 75
	G. A. Shallenberger, superintendent.....	Pay roll, February.....	635. 50
	do.....	do.....	290. 00
	do.....	do.....	101. 25
	do.....	Compensation.....	57. 00
	do.....	Sundries.....	28. 26
	Walter H. Evans.....	Bay horse.....	200. 00
	G. F. Swift & Co.....	Meat.....	115. 32
	J. J. Hogan.....	Oysters.....	6. 90
	Browning & Middleton.....	Groceries.....	219. 51
	Hume & Co.....	do.....	51. 67

186 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Statement of disbursements of current expenses of the Reform School, etc.—Continued.

Date.	Name.	For what expended.	Amount.
Feb. 28, 1891	Beall & Baker	Groceries	\$98.22
	Jas. F. Oyster	Butter	26.40
	Hygienic Ice Co.	Ice	8.90
	W. M. Galt & Co.	Flour, etc.	267.96
	Tschiffley & Evans	Medicines	11.32
	Chas. R. Wells	Medical attendance	94.00
	Edw. S. Schmid	Tobacco stems	5.04
	Washington Gaslight Co.	Gas	85.00
	Guy Curran & Co.	Sundries	34.37
	Eiseman Bros	Clothing	23.00
	Lansburgh & Bro	Dry goods	21.99
	Woodward & Lothrop	do	77.79
	W. L. King & Bro	Leather	16.47
	Robt. Cohen	Shoes	19.25
	Wm. Ballantyne & Sons	Stationery	8.33
	Oppie Anderson	Blacksmithing	5.88
	O'Neill Bros	do	10.00
	Columbia Railway Co	Manure	35.00
	Jno. A. Baker	Implements	14.93
	J. E. Berry	Conveyance	40.00
	Geo. W. Knox	do	10.00
	J. L. Moth	Castings	3.01
	L. H. Schneider's Son	Farm tools	4.24
	J. Karr	Clock	11.00
	Hutchinson Bros	Castings	16.27
	Geo. Ryneal, jr.	Paint, etc	10.55
	F. P. May & Co.	Hardware	15.98
	M. W. Beveridge	Tableware	29.78
	Notley Anderson	Repairs	72.00
	Thos. W. Smith	Lumber	19.44
Mar. 31, 1891	G. A. Shallenberger, superintendent	Pay roll, March	635.50
	do	do	290.00
	do	do	90.00
	J. F. McCay, agent	Compensation	47.50
	G. A. Shallenberger, superintendent	Transportation	9.60
	Allen R. Adams	Sundries	35.72
	Hume & Co	Compensation	8.75
	Beall & Baker	Groceries	71.01
	Browning & Middleton	do	82.89
	Jas. F. Oyster	do	180.43
	Hygienic Ice Co.	Butter	61.90
	W. M. Galt & Co.	Ice	5.40
	G. F. Swift & Co.	Flour, etc	258.05
	R. A. Golden	Meat	145.25
	J. J. Hogan	Fish	16.85
	Lansburgh & Bro	Oysters	4.20
	Woodward & Lothrop	Dry goods	13.82
	Eiseman Bros	do	115.95
	Jos. Auerbach	Clothing	32.00
	Guy Curran & Co.	Hats	4.00
	Robt. Cohen	Sundries	16.61
	W. L. King & Bro	Shoes	15.75
	Washington Gaslight Co	Shoe findings	28.49
	F. P. May & Co.	Gas	78.25
	M. W. Beveridge	Hardware	4.50
	John A. Baker	Tableware	9.15
	Peter Henderson & Co	Seeds	4.24
	Columbia Railway Co	do	27.03
	Oppie Anderson	Manure	35.00
	John McCormick	Blacksmithing	13.25
	Wm. Ballantyne & Sons	One horse	200.00
	Tschiffley & Evans	Stationery	11.20
	Chesapeake and Potomac Telephone Co.	Medicine	24.05
	J. E. Berry	Rental to March 31	62.50
	J. H. Dabney	Conveyance	8.00
	S. S. Shedd & Bro	Undertaking	13.00
	Notley Anderson	Gas repairs	5.17
	Thomas W. Smith	Carpentering	56.00
	C. Giebel	Lumber	3.60
	George Ryneal, jr.	Repairs	11.00
	K. Kneesi's Sons	Paint	28.54
	Wash. B. Williams	Harness	17.25
Apr. 30, 1891	S. W. Curriden	Furniture	156.63
	Notley Anderson	Services to March 31	150.00
	Allen R. Adams	Carpentering	76.00
	E. E. Hastings, agent	Compensation	13.00
	G. A. Shallenberger, superintendent	Transportation	36.55
	do	Pay roll, April	638.00
	do	do	290.00
	do	do	102.75
	Ward & Cunningham	Compensation	70.50
		Plumbing	105.67

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 187

Statement of disbursements of current expenses of the Reform School, etc.—Continued.

Date.	Name.	For what expended.	Amount.
Apr. 30, 1891	Allen R. Adams.....	Compensation	\$11. 25
	Browning & Middleton.....	Groceries	178. 63
	Hume & Co	do	72. 55
	Beall & Baker	do	103. 95
	Hygienic Ice Co.....	Ice	10. 30
	W. M. Galt & Co	Flour, etc.....	274. 65
	G. F. Swift & Co.....	Meat	161. 19
	R. A. Golden.....	Fish	22. 90
	J. J. Hogan	Oysters	4. 50
	Woodward & Lothrop.....	Dry goods.....	124. 12
	Lansburgh & Bro	do	52. 62
	Eiseman Bros	Clothing.....	32. 00
	Guy Curran & Co	Sundries.....	36. 64
	C. H. Garden & Co.....	Hats.....	26. 60
	Robt. Cohen.....	Shoes.....	20. 50
	W. L. King & Bro.....	Shoe findings	28. 99
	John P. Agnew & Co	Coal	205. 60
	Washington Gaslight Co.....	Gas	60. 00
	L. H. Schneider's Son	Tools	14. 51
	M. W. Beveridge.....	Tableware	16. 44
	F. P. May & Co	Hardware	22. 82
	Columbia Railway Co	Manure.....	35. 00
	John A. Baker	Farm tools.....	49. 65
	O'Neill Bros.....	Blacksmithing.....	11. 63
	George E. McElfresh.....	Printing.....	14. 00
	J. C. Addison.....	Stationery	5. 73
	Charles A. Wells.....	Medical attendance	96. 00
	J. E. Berry	Conveyance.....	16. 00
	Louis Baer, agent.....	Repairs.....	7. 00
	John R. Frick.....	Capturing boy	10. 27
	John N. Tolson	do	10. 27
	Charles Chase.....	Repairs.....	8. 25
	G. A. Shallenberger, superintendent.....	Sundries.....	37. 83
	N. Anderson.....	Carpentering	60. 00
	Thomas W. Smith.....	Lumber.....	140. 38
	George Ryneal, jr.....	Paint, etc.....	27. 61
	James F. Oyster.....	Butter.....	110. 14
May 30, 1891	G. A. Shallenberger, superintendent	Pay roll, May	638. 00
	do	do	290. 00
	do	do	90. 00
	do	Compensation	45. 50
	W. K. Cohen.....	Pay roll, May	25. 00
	Charles Chase.....	Repairs.....	6. 00
	N. Anderson.....	Carpentering	100. 00
	Allen R. Adams.....	Compensation	7. 85
	Hume & Co	Groceries	37. 71
	Beall & Baker	do	118. 55
	Browning & Middleton.....	do	185. 86
	James F. Oyster.....	Butter.....	100. 30
	Hygienic Ice Co.....	Ice	10. 20
	W. M. Galt & Co	Flour, etc.....	340. 79
	J. A. Hoffman & Son.....	Meat	186. 93
	G. F. Swift & Co.....	Flour, etc.....	14. 56
	R. A. Golden.....	Fish	24. 20
	Woodward & Lothrop.....	Dry goods	82. 82
	Guy Curran & Co	Sundries.....	22. 65
	Aug. Thomas & Co.....	Caps.....	18. 00
	C. H. Garden & Co.....	Hats.....	13. 50
	Robert Cohen.....	Shoes.....	30. 55
	W. L. King & Bro.....	Shoe findings	19. 46
	Washington Gaslight Co	Gas	45. 75
	M. W. Beveridge.....	Tableware	39. 07
	F. P. May & Co	Hardware	11. 25
	John A. Baker.....	Farm tools	38. 14
	Columbia Railway Co.....	Manure.....	35. 00
	William Smith.....	Shell lime.....	3. 60
	Oppie Anderson.....	Blacksmithing.....	16. 10
	L. H. Schneider's Son	Steel barrows.....	15. 00
	Easton & Rupp.....	Books	13. 00
	Tschiffley & Evans.....	Medicine	16. 55
	F. L. Kilbourne.....	Veterinary services.....	7. 50
	G. A. Shallenberger, superintendent.....	Sundries.....	26. 20
	J. E. Berry	Conveyance.....	28. 00
	W. H. Houghton Manufacturing Co	Lineoleum, etc	92. 92
	Thomas W. Smith.....	Lumber.....	14. 24
	George Ryneal, jr.....	Paint, etc.....	35. 78
	Clark Bros	Lime	12. 00
	George N. Holland.....	Lime and cement	21. 60
	George Y. Hansell.....	Wall paper	18. 50
	Jos. Zane & Co	Faucets	30. 00
	Robert Leitch & Sons	Pipe	2. 90
	Washington Brick Machine Co	Brick.....	33. 00

188 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Statement of disbursements of current expenses of the Reform School, etc.—Continued.

Date.	Name.	For what expended.	Amount.
May 30, 1891	Wash. B. Williams	Furniture	\$139.07
	Ivy City Brick Company	Brick	104.70
	Childs & Sons	do	123.75
	Andrew Lynch	Mason work	150.65
	Eiseman Brothers	Clothing	22.50
	Lansburgh & Bro	Dry goods	7.00
	John Dixon	Painting	75.00
	J. D. Free, jr	Stationery	17.82
	William Ballantyne & Sons	do	16.27
	John A. McCormick	Horse medicine	10.00
June 30, 1891	Tschiffely & Evans	Medicine	10.94
	S. W. Curriden	Services to June 30	150.00
	G. A. Schallenberger, superintendent	Pay roll, June	638.00
	do	do	300.00
	do	do	90.00
	do	Compensation	79.19
	do	Sundries	36.10
	Allen R. Adams	Compensation	12.25
	Browning & Middleton	Groceries	210.57
	Beall & Baker	do	85.92
	Hume & Co	do	84.74
	James F. Oyster	Butter	93.35
	Hygienic Ice Co.	Ice	32.10
	C. Denekas	Yeast	63.00
	W. M. Galt & Co.	Flour	325.15
	G. F. Swift & Co.	Meat	271.70
	R. A. Golden	Fish	22.50
	Lansburgh & Bro	Dry goods	40.98
	Woodward & Lothrop	do	76.68
	Guy Curran & Co	Sundries	46.45
	Eiseman Brothers	Clothing	53.50
	Robert Cohen	Shoes	21.30
	W. L. King & Bro	Shoe findings	31.16
	Washington Gaslight Company	Gas	36.50
	F. P. May & Co	Hardware	10.13
	L. H. Schneider's Son	do	15.91
	M. W. Beveridge	Tableware	28.83
	B. F. Guy & Co	Houseware	4.25
	A. Gude & Bro	Plants	36.00
	O'Niel Brothers	Blacksmithing	11.25
	Oppie Anderson	do	13.05
	John A. Baker	Farm tools, etc	46.30
	A. J. Joyce's Sons	Repairs to wagon	41.00
	K. Kneesi's Sons	Harness	30.75
	J. C. Addison	Stationery	6.15
	William Ballantyne & Son	do	19.51
	J. D. Free, jr	Books	8.16
	George E. McElfresh	Printing	6.50
	Charles A. Wells	Medical attendance	74.00
	Tschiffely & Evans	Medicine	14.00
	J. E. Berry	Conveyance	29.50
	R. C. M. Burton	Awnings	30.00
	Charles H. Dickson, agent	Rental gas governor	30.00
	C. and P. Telephone Company	Rental to June 30	62.50
	George Prince	Photographs	20.00
	George I. Mueller	Sundries	13.55
	S. S. Shedd & Bro	Gas fixtures	3.06
	J. Karr	Repairing clock, etc	6.00
	W. H. Houghton Manufacturing Co	Furniture	32.40
	Wash. B. Williams	do	130.04
	George N. Holland	Cement	48.50
	Thomas A. Smith	Lumber	99.56
	N. Anderson	Carpentering	104.00
	Acker & Co	Stone sill	4.00
	Ward & Cunningham	Plumbing	47.08
	Thomas Summerville & Sons	Pipe fitting, etc	12.03
	Clark Bros	Lime	9.10
	George Ryneal, jr	Paint, etc	19.15
	W. K. Cohen	Pay roll, June	25.00
	Aug. Stubener	Meat	5.37
	W. R. Speare	Coffin	22.00
	Columbia Railway Co	Manure	35.00
	J. W. Bayne	Medical attendance	10.00
	W. E. Diffenderfer	Dental services	11.00
	E. L. Whitford & Co	Seed potatoes	94.50
	John McDermott & Bro	Repairing carriage	3.50
	John Dixon	Painting, etc	370.00
Total			40,572.05

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 189

Statement of disbursements on account of appropriation for improvement of grounds, Reform School, District of Columbia, for the fiscal year ended June 30, 1891.

Date.	Name.	For what expended.	Amount.
Sept. 30, 1890	Washington Brick Machine Co.....	Brick	\$24.00
Dec. 31, 1890	William Simons.....	Labor	5.12
	Thos. J. Shelton.....	do	5.12
	Washington Brick Machine Co.....	Brick	50.00
Apr. 30, 1891	H. Smallwood	Labor	3.00
	Andrew Barbour, jr	Mason work	40.00
	do.....	do	45.00
May 31, 1891	Andrew Barbour.....	do	64.00
June 30, 1891	Potomac Terra Cotta Co.....	Pipe	62.33
	Total.....		298.57

Statement of disbursements on account of appropriation for painting buildings, Reform School, District of Columbia, for the fiscal year ended June 30, 1891.

Date.	Name.	For what expended.	Amount.
Dec. 22, 1890	John Dixon	Painting	\$375.00
May 30, 1891	do	do	125.00
	Total.....		500.00

SAM'L W. CURRIDEN,
Treasurer.

REPORT OF THE PHYSICIAN.

REFORM SCHOOL OF THE DISTRICT OF COLUMBIA,
June 30, 1891.

GENTLEMEN: During the past year while, taken as a whole, we have had no unusual amount of sickness among the boys, we have had some very serious and protracted cases of illness. We have had no fatal results, except in the case of the boy Frederick Wheeler, who received a wound with a sharpened shoe knife in the hands of Samuel Simpson, another colored boy. This occurred about 10 a. m. February 26, the day appointed for our annual entertainment, and while the bustle of preparation for the evening was at its height.

I found the boy's condition so precarious and alarming that I determined to secure the advice of Dr. John W. Bayne. At this consultation we concluded that the operation of laparotomy would probably afford him the only chance of recovery, and to give him the very best possible attention we caused him to be removed in the ambulance to Providence Hospital, where the operation was performed by Surgeon-General Hamilton; but the patient steadily grew worse, and the next day died.

The autopsy not only revealed the extent of the wound in the abdomen and lungs, but showed that the apex of the heart was punctured, thus accounting for the collapse which had already set in when I reached him within forty minutes after the injury.

I beg leave to renew my recommendation of two years ago, that outside water-closets similar to those in use in "B" family building be erected for the other buildings.

Another matter to which I desire to call your attention is the fact

that the hospital rooms are immediately over the room used for Sunday school and religious services. It not infrequently happens that my sick boys are made worse because of the singing and music, and on several occasions I have been compelled to ask the superintendent to discontinue these services. This could be obviated by the erection of a building for such services away from the family building (as I am told is usually the case in similar institutions), and in the interest of my sick boys I beg that this may speedily be done.

In the matter of ventilation and cleanliness we relax nothing of our accustomed vigilance, and all soil, drain, and water pipes are thoroughly and systematically disinfected once a week.

Very respectfully,

CHAS. A. WELLS, M. D.,
Attending Physician.

The BOARD OF TRUSTEES,
Reform School, D. C.

I 3.

INDUSTRIAL HOME SCHOOL.

WASHINGTON, D. C., *August 1, 1891.*

GENTLEMEN: I would most respectfully herein submit my annual report of the disbursement of the funds appropriated by the Congress of the United States for the "Maintenance," etc., of the Industrial Home School of the District of Columbia for the fiscal year 1891.

The year, as a whole, has been a successful one. We very much regret that the appropriation for "a small hospital"—*i. e.*, \$500—was so small and the law appropriating it so worded that we could not use it. We are sadly in need of a hospital, but such a one as \$500 would build would be of little use to us. We have cared for more children this year than ever before, and experience has taught us that the sum appropriated is not sufficient to support 100 children properly.

The \$2,000 appropriated by Congress for "Material for industrial labor and repair" was all expended for the purpose for which it was given.

The sum appropriated for "Salaries, maintenance," etc., was disbursed as follows, viz:

Bread.....	\$948.51	Miscellaneous articles.....	\$849.61
Clothing.....	130.79	Meat.....	422.30
Crockery.....	51.76	Manure.....	19.00
Coal.....	1,120.95	Salaries.....	4,523.02
Drugs.....	85.80	Stationery.....	9.65
Dry goods.....	422.79	Shoes.....	322.06
Furniture.....	116.65	Seeds and plants.....	76.83
Groceries.....	1,300.04	Smithing.....	79.92
Gas.....	177.90	Wood.....	4.00
Lumber.....	103.26	Feed.....	481.18
Lime and cement.....	5.98		
Milk.....	248.00		
		Total.....	11,500.00

As has been our custom for a number of years we have kept a private bank account, the funds of which are derived from subscriptions, membership fees, sales of flowers from the greenhouse, tree boxes, etc., made by the boys—but for which we should have been in sore need of money, there not being sufficient of the Congressional appropriation to defray the current expenses of the school for the year. This account

is, by direction of the board of managers, kept in the Farmers and Mechanics' National Bank, and at the beginning of the year had to its credit a balance of \$512.32; received during the year, \$1,108.93; total, \$1,621.25.

Expended:

Bread	\$87. 71
Books	37. 40
Clothing	10. 80
Drugs	2. 00
Dry goods	63. 58
Furniture	27. 20
Feed	35. 63
Groceries	109. 38
Hats	4. 50
Hardware	9. 20
Insurance	12. 50
Ice cream	5. 50
Ironwork	4. 34
Miscellaneous	54. 50
Manure	13. 70

Expended—Continued.

Reservoir	\$459. 01
Repairing shoes	11. 80
Repairing tinware	2. 20
Paints, oils, etc	85. 50
Piano	250. 00
Plants	19. 09
Heating greenhouse	174. 55
Meat	36. 09
Shoes	8. 58
Smithing	1. 43
Seeds, etc	8. 19
Total expenditure	1, 534. 38
Balance in Farmers and Me- chanics' National Bank	86. 87

The introduction of steam heat and gas to the institution, although the annual cost is more, has proven of great advantage. The constant, regular heat throughout the many rooms has added much to the comforts of the inmates of the home.

The doing away with over thirty fires in stoves and the avoidance of the use of coal-oil lamps and candles have of course decreased the liability of accidental fires to an incalculable degree.

In order that the necessary repairs and improvements, which have scarcely begun by the use of the \$2,000 given us last year, may be well completed and that the board may not be constantly compelled to draw from the children's living fund to keep buildings, etc., in comfortable condition, I would recommend that your honorable board ask for an appropriation of \$20,000 for the maintenance and general expenses of the Industrial Home School of the District of Columbia for the fiscal year ending June 30, 1893.

Respectfully submitted.

B. T. JANNEY,
Treasurer.

Approved:

President Board of Managers Industrial Home.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

J.

REPORT OF INSPECTOR OF BUILDINGS.

OFFICE OF THE INSPECTOR OF BUILDINGS,
November 2, 1891.

GENTLEMEN I have the honor to submit herewith my annual report covering the transactions of this department during fiscal year ending June 31, 1891, together with estimates and recommendations for the fiscal year ending 1893:

Statement of permits issued from July 1, 1890, to June 30, 1891.

Description.	Brick or frame.	Number.	Value.
Dwellings.....	Brick.....	1, 659	\$4, 817, 008
Stables (private)	do.....	76	89, 900
Stables (livery)	do.....	2	18, 000
Warehouses and shops.....	do.....	29	205, 525
Stores.....	do.....	18	149, 100
Office buildings	do.....	11	115, 000
Churches.....	do.....	7	51, 000
School buildings.....	do.....	4	56, 000
Halls.....	do.....	2	9, 400
Banks.....	do.....	2	95, 000
Club house.....	do.....	1	60, 000
Hotel.....	do.....	1	147, 000
Apartment house	do.....	1	25, 000
Depot.....	do.....	1	4, 000
Power house	do.....	1	500, 000
Repairs and additions.....	do.....	681	810, 314
Dwellings.....	Frame.....	475	476, 975
Stables.....	do.....	7	10, 525
Church.....	do.....	1	3, 000
Ice house	do.....	1	4, 000
Stores.....	do.....	4	2, 250
Hotel.....	do.....	1	6, 000
Depot.....	do.....	1	4, 000
Baseball stand	do.....	1	5, 000
Frame repairs and additions.....	do.....	576	114, 054
Frame removals.....	do.....	11	1, 140
Frame sheds	do.....	428	25, 110
Boiler locations	do.....	2	
Lumber-yard location	do.....	1	
Railings.....	do.....	479	
Awnings.....	do.....	108	
Cubic feet of vaults.....	do.....	100, 164	
Total.....		4, 582	7, 804, 301

There were issued during the year 930 permits for the use of water for building purposes, amounting to the sum of \$2,169.27. The fees from building permits amounted to the sum of \$9,901.92, making the total revenue \$12,071.19.

By reference to the foregoing statement it will be seen that there have been erected 2,134 dwellings, buildings of all classes 2,305, repairs and additions 1,697, being 21 dwellings, buildings of all classes 59, and repairs and additions 119, and in value \$51,568 in excess of the preceding year.

The above statement shows a steady increase in the number and value of private buildings, and their character and construction will compare favorably with any other large city. It is a great strain on the force of this office to keep up a proper inspection of buildings in course of construction, there being but two assistants on that work and fully half their time is taken up investigating causes of complaint and the correction of house numbering. My time being principally taken up with the work of the office and the supervision of the construction and repair of all district buildings, I must therefor urge upon you the necessity for two more assistant inspectors to enable us to properly control the construction of buildings. It is not possible with the present force and the large area which includes the entire District to properly inspect and control all buildings in course of construction. The revenues of this office fully meet all its expenses, and when you consider that on new buildings alone, designed and constructed through this office for the District of Columbia, there is a saving in that work of not less than \$5,000 per annum, as fees from such work if done by outside architects. You can readily see that the request is a reasonable one, and the importance of the work to the community controlling the safety and security from fire on all buildings justifies the increase. There have been condemned, and ordered taken down, 21 brick buildings and 43 frame buildings, also 24 party walls as unfit for the purpose of adjacent new buildings.

The following notices have been served, viz:

To vacate dangerous buildings	32
To make good defective vaults	7
To make good defective construction in brick and frame buildings.....	57
To take out permits to build	13
To close windows in party walls.....	9
To repair and make safe defective chimneys.....	10
To move buildings, sheds, and fences to building line from streets and alleys...	27
To move building materials from streets and alleys	18
To connect down spouts with sewers	14
To protect open areas.....	8
To locate party walls	14

The proper numbers have been given for 1,659 new buildings, and in connection with the water department there have been 515 notices sent to change numbers on old buildings.

One hundred and sixty-one notices have been served to change construction and the quality of materials used. Four hundred and nine written reports of examinations of construction and repairs of buildings have been made in the different localities of the city and county.

The following work has been performed during the year by the inspector of elevators:

Elevators inspected.....	102
Elevators condemned for repairs	27
Elevators in good condition.....	75
Elevators in a dangerous condition and closed until put in good condition	2

DISTRICT BUILDINGS.

Plans and specifications have been prepared in this office and there were erected during the year five eight-room school buildings, one high-school building, for colored pupils, additional stories to the station houses in the fourth and sixth precincts, stable buildings in the fifth and eighth precincts, a cell building adjoining the police court, and improvements to the adjoining property leased by the District, one new ward to the Washington Asylum, an addition to the male work-

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house, a truck house for the fire department, a building for the Central Dispensary and Emergency Hospital, also a bathing beach on the Potomac River, near the Washington Monument. The appropriations for the several buildings have been expended as follows:

For four eight-room school buildings in the first, third, seventh, and eighth school divisions:

Appropriation \$155,000.00

Harrison school building—First division.

Cost of site	\$17,644.25
Surveying	10.00
Printing specifications	32.40
Heating contract, No. 1401	2,152.00
Contract	24,874.50
Superintendence	640.00
Recording deed	1.50
Blackboarding	85.94
 Total	 45,440.59

Tyler school building—Third division.

Cost of site	8,691.00
Surveying	5.00
Printing specifications	29.16
Heating, contract No. 1341	2,152.00
Contract No. 1374	22,875.00
Superintendence	824.00
Recording deed	1.50
Blackboarding	85.94
 Total	 34,663.60

Phillips school building—Seventh division.

Cost of site	\$11,400.00
Surveying	15.00
Printing specifications	29.16
Heating, contract No. 1417	2,152.00
Contract No. 1403	20,750.00
Superintendence	156.00
Recording deed	1.50
Extra depth of foundations caused by defective ground	2,963.10
 Total	 37,466.76

Slater school building—Eighth division.

Cost of site	\$11,000.00
Surveying	12.50
Printing specifications	29.16
Heating, contract No. 1401	2,152.00
Contract No. 1396	23,225.00
Superintendence	620.00
Recording deed	1.50
Extra depth for vault and extending 6-inch sewer	27.80
 Total	 37,067.69

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SUMMARY.

Harrison building	\$45,440.59
Tyler building	34,663.60
Phillips building	37,466.76
Slater building	37,067.96
Total for buildings	154,638.91
Drawing materials	54.88
Draftsman	304.00
Aggregate	154,997.79
Balance of appropriation	2.21

VAN BUREN SCHOOL BUILDING—ANACOSTIA.

Appropriation	\$25,000.00
Printing specifications	29.16
Heating, contract No. 1341	2,152.00
Contract	20,950.00
Superintendence	964.00
Blackboarding	83.94
Transportation	20.00
Sodding	60.00
Excavating for and building walls, west and north sides	63.21
Gas pipes for two additional burners, each room	25.00
Constructing flues and building porch and step ladder	262.22
Connecting sewer on Jefferson street	105.00
Picket fence, painting, and paving walk	98.75
Plastering base of front wall	15.00
Bell	49.50
Total	24,878.38
Deduct for gas service	13.50
Total	24,864.88
Balance of appropriation	135.12

COLORED HIGH SCHOOL.

The original appropriation for this building was \$60,000, and after purchasing the site it was found that the amount left was not sufficient to construct the building, and on my advice it was determined to postpone building operations until an additional appropriation of \$79,000 was obtained. This being granted the construction was commenced and the expenditure made as follows:

Appropriations	\$139,000.00
Site	24,592.50
Recording deed	1.75
Printing specifications	29.16
Drawing materials	41.38
Surveying	7.50
Draftsman	144.00
Superintendence	1,244.00
Contract No. 1312	69,653.00
Dry closets	1,145.00
Blackboarding	190.84
Tank in roof and connections in chemical laboratory	794.00
Sodding and grading terrace	137.50
Plumbing in physical and botanical laboratories	775.00
Plumbing in assembly hall, chemical and physical laboratories	384.00
Ventilators in dark room	38.00

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Fixtures in laboratories	\$386.50
Furnishing and making 192 drawers and 96 doors for tables in chemical laboratory	504.00
Extra plumbing in class room, northwest corner of building	89.00
Hoods and case in chemical laboratory	213.87
Excavating and building retaining fence walls	834.85
Cross-furring floors, first, second, and third stories	351.00
Changing down spouts on front and rear walls; also running additional gas pipes in basement	95.00
Additional plumbing in physical, chemical, and botanical laboratories and drawing departments	875.00
Partition in conservatory constructed with boxes for weights	378.00
Furring exterior walls of basement, and providing two iron chutes	32.00
Building 9-inch walls in west wing, 7 feet; placing floors upon them, projecting beyond walls	160.00
Cutting out in 13-inch wall a doorway, providing door, and painting same	27.00
Three tables, drawers, and doors for the chemical laboratory	114.00
Forming dark room and connection to the chemical laboratory	250.00
Raising rear area, and setting two bluestone steps	86.00
Enlarging granite base for columns	96.00
Extra concreting and slating in fence wall	58.71
Iron fence for parking	349.89
Painting fence	49.05
Galvanized iron hoods, steam coils valves, trap, and heater in physical and chemical laboratories	319.81
Vertical boiler and steam pump	349.00
Gas fixtures	471.00
Case in botanical class room	85.00
Two cases in botanical laboratory and conservatory	122.50
Two cases in library	210.86
Two cases in physical laboratory	570.00
Drawing department:	
One case of lockers 22 feet long	55.90
Two cases of lockers 16 feet long	76.00
One case of lockers 15 feet long	97.00
Two cases of lockers 6 feet long	50.00
One case in chemical laboratory	97.00
Sixteen experimental stands in physical laboratory	192.00
One stand in chemical laboratory lecture room	86.25
Total	106,909.82
Balance of appropriation	32,090.18

The above buildings are of the best character in point of construction, convenience, light, and ventilation, and will compare with the most improved school buildings in the United States. The colored high school is the most superior in its appointments in every particular. By the accompanying statement it will be seen that with those now completed there are ninety-six public-school buildings owned by the District, and with those now in course of construction, when completed, one hundred and two. There are several of the old school buildings, viz, Potomac, Greenleaf, Cranch, Cook, Lincoln, Lovejoy, Seaton, Stevens, Sumner, Thompson, Wallach, and Threlkeld, and all county schools, except Monroe and Van Buren, that are not ventilated sufficiently, but as in each case the water closets or privies are outside of them and for that reason they can not be considered insanitary.

Name.	Location.	Style of building.	Size.	Description.	How heated.	When erected.	No. of rooms.	Value of site.	Value of building.	Total.
High school	O st., bet. 6th and 7th sts., NW.	Brick...	Feet. 197 by 75	Three stories and basement.	Steam	1883	38	\$75,000	\$118,078	\$193,078
Abbott school	Cor. New York ave. and 6th st., NW.	do	102 by 42	do	Furnace	1876	9	5,158	20,000	25,158
Amidon	Cor. 6th and F sts., SW	do	81 by 69	Two stories and basement	do	1882	8	5,949	18,232	24,181
Anacostia	9th st. and Virginia ave. SE	do	38 by 24	Two stories	Stoves	1840	2	(*)	2,000	2,000
Grant	G st., bet. 21st and 22nd sts., NW.	do	92 by 88	Three stories and basement	Steam	1882	12	8,000	40,428	48,428
Bowen	Cor. 7th and E sts., SW	do	88 by 45	Two stories	Stoves	1867	8	1,672	5,000	6,672
Banneker	3rd st., bet. K and L, NW	do	81 by 69	Two stories and basement	Furnace	1882	8	3,500	20,000	23,500
Brent	Cor. 3rd and D sts., SE	do	81 by 69	do	do	1883	8	2,135	22,065	24,200
Chamblin	East st., Georgetown	Frame	88 by 40	do	Stoves	.....	12	1,169	1,000	1,169
Cranch	Cor. 12th and G sts., SE	Brick	79 by 36	Three stories and basement	Steam	1872	6	622	16,000	16,622
Curtis	2nd st., bet. High and Market	do	97 by 79	do	do	1875	8	1,908	60,000	61,908
Force	Massachusetts ave., bet. 17th and 18th sts., NW.	do	90 by 73	do	do	1879	12	(*)	36,215	36,215
Franklin	Cor. 13th and K sts., NW	do	148 by 79	do	do	1869	16	17,564	188,000	205,564
Gales	Cor. 1st and Mass. ave., NW	do	90 by 66	do	do	1881	12	10,000	40,116	50,116
Garnett	Cor. 10th and M sts., NW	do	90 by 73	do	do	1880	12	7,120	35,000	42,120
Greenleaf	4½ st., bet. M and N sts., SW	do	72 by 32	Two stories	Stoves	1869	4	1,500	8,000	9,500
Henry	P st., bet. 6th and 7th, NW	do	89 by 73	Three stories and basement	Steam	1880	12	25,000	45,000	70,000
Jefferson	Cor. 6th and D sts., SW	do	172 by 88	do	do	1872	20	18,896	50,000	68,896
Jno. F. Cook	O st., bet. 4th and 5th sts., NW.	do	96 by 58	do	Furnace	1868	11	2,160	18,000	20,160
Lincoln	Cor. 2nd and C sts., SE	do	75 by 68	do	Steam	1871	10	3,460	20,000	23,460
Lovejoy	Cor. 12th and D sts., SE	do	60 by 35	Two stories and basement	Stoves	1872	6	(*)	10,000	10,000
McCormick	3rd st., bet. M and N sts., SE	do	55 by 45	do	Furnace	1870	4	407	7,000	7,407
Morse	R st., bet. New Jersey ave. and 5th st.	do	81 by 69	do	do	1883	8	4,578	23,670	28,248
Peabody	Cor. 5th and C sts., NE	do	90 by 90	Three stories and basement	Steam	1879	12	2,500	38,150	40,650
Potomac	12th st., bet. Md. ave. and E st., SW.	do	72 by 32	Two stories	Stoves	1870	4	584	4,500	5,084
Randall	Cor. 1st and I sts., SW	do	90 by 72	Three stories	Furnace	1876	10	727	40,000	40,727
Seaton	I st., bet. 2d and 3d sts., NW	do	94 by 67	Three stories and basement	Steam	1871	11	11,325	35,000	46,325
Stevens	21st st., bet. K and L sts., NW	do	88 by 48	do	do	1868	10	4,944	38,321	43,265
Sumner	Cor. 17th and M sts., NW	do	94 by 69	do	do	1871	11	18,875	70,000	88,875
Thompson	12th st., bet. K and L sts., NW	do	91 by 28	do	do	1877	6	2,906	8,000	10,906
Twining	3d st., bet. N and O sts., NW	do	81 by 69	Two stories and basement	Furnace	1883	10	4,681	24,070	28,751
Wallach	Pa. ave., bet. 7th and 8th sts., SE.	do	99 by 76	Three stories and basement	Steam	1864	12	14,517	40,000	54,517
Webster	Cor. 10th and H sts., NW	do	107 by 64	do	do	1884	12	15,000	41,053	56,053
Odd Fellows' Hall	Cor. 7th and G sts., SE	do	40 by 22	Two stories	Steam	1840	2	433	1,200	1,633
Do.	High and Market (Georgetown)	Frame	58 by 30	Two stories and basement	do	.....	2	584	3,000	3,584
Threlkeld	Cor. Prospect and Leingan (Georgetown).	Brick	75 by 29	do	do	.....	4	670	5,000	5,670
Dennison	S st. bet. 13th and 14th sts., NW	do	92 by 89	Three stories and basement	Steam	1884	12	11,627	45,181	56,808

*United States Ground.

Name.	Location.	Style of building.	Size.	Description.	How heated.	When erected.	No. of rooms.	Value of site.	Value of building.	Total.
Blair.....	I st., bet. 6th and 7th sts., NE.	Brick	Feet. 70 by 84	Two stories and basement	Furnace	1884	8	\$3,500	\$22,071	\$25,571
Woruley.....	Prospect ave., bet. 33d and 34th sts., NW.	do	70 by 84	do	do	1884	8	3,750	23,495	27,245
Addison.....	P st., bet. 32d and 33d sts., NW	do	54 by 98	do	do	1885	8	(*)	29,313	29,313
Maury.....	B st., bet. 12th and 13th sts., NE	do	70 by 84	do	do	1886	8	3,382	25,798	29,180
Weightman.....	23d and M sts., NW	do	76 by 83	do	do	1887	8	13,574	29,234	42,808
Towers.....	Cor. 8th and C sts., SE	do	56 by 104	do	do	1887	8	(†)	24,999	24,999
Magruder.....	M st., bet. 16th and 17th sts., NW.	do	56 by 104	do	do	1887	8	(†)	25,973	25,973
Carberry.....	5th st., bet. D and E sts., NE	do	70 by 84	do	do	1887	8	6,456	29,980	36,436
Phelps.....	Vermont ave., bet. T and U sts., NW.	do	70 by 84	do	do	1887	8	10,466	24,521	34,987
Giddings.....	G st., bet. 3d and 4th sts., SE	do	70 by 84	do	do	1887	8	7,188	24,952	32,140
Blake.....	N. Capitol, bet. K and L sts., NW.	do	70 by 84	do	do	1887	8	9,985	24,973	34,958
Bradley.....	13½ st., bet. C and D sts., SW	do	70 by 84	do	do	1887	8	5,000	24,992	29,992
Smallwood.....	I st., bet. 3d and 4½ sts., SW	do	70 by 83	do	do	1888	8	8,519	26,652	35,171
Adams.....	R st., bet. 17th st. and New Hampshire ave., NW.	do	70 by 83	do	do	1888	8	16,322	26,652	42,974
Jones.....	1st and L st., NW	do	67 by 83	do	do	.....	8	10,500	25,396	35,896
Arthur.....	Arthur Place, NW	do	67 by 83	do	do	.....	8	10,605	27,652	38,257
Corcoran.....	28th st., near M, NW	do	68 by 82	do	do	.....	8	7,100	25,952	33,052
Briggs.....	22d and E st., NW	do	67 by 83	do	do	.....	8	8,500	24,619	33,119
Lenox.....	5th st., bet. G st. and Va. ave.	do	70 by 83	do	do	.....	8	4,000	25,135	29,135
Berret.....	Cor. 14th and Q sts., NW	do	50 by 100	Three stories and basement	do	.....	9	15,000	25,049	40,049
Bell.....	1st, bet. B and C sts., SW	do	67 by 83	Two stories and basement	do	.....	8	9,536	25,609	35,145
Madison.....	10th and G sts., NE	do	70 by 84	do	do	1889	8	6,468	25,644	32,112
Jackson.....	Road st., bet. 30th and 31st	do	70 by 84	do	do	1889	8	10,000	28,031	38,031
Ganison.....	12th st., bet. R and S, NW	do	70 by 84	do	do	1889	8	8,250	24,540	32,790
Ambush.....	L st., bet. 6th and 7th sts., SW	do	70 by 84	do	do	1889	8	11,750	23,885	35,635
Harrison.....	13th near V st., NW	do	75 by 101	do	do	1890	8	17,644	27,796	45,440
Tyler.....	11th st., near G SE	do	70 by 84	do	do	1890	8	8,691	25,972	34,663
Phillips.....	N st., near 28th, NW	do	70 by 84	do	do	1890	8	11,400	26,066	37,466
Slater.....	P st., near N. Capitol, NW	do	70 by 84	do	do	1890	8	11,000	26,067	37,067
High school (colored).....	M, bet. New Jersey ave. and 1st st., NW.	do	80 by 147	Three story and basement	Steam	1890	24	24,592	82,317	106,909

*Part of Curtis site.

†Part of Wallach site.

‡Part of Sumner site.

County school buildings.

Name.	Locality.	Description.	How heated	When erected.	No. of rooms.	Value of site.	Value of building.	Total.
Conduit road		Frame, good condition	Stoves	1874	1	(*)	\$1,200	\$1,200
Ridge road		Frame	do	1865	1	100	600	700
Tennallytown		Brick	do	1882	4	500	4,000	4,500
Grant road		Frame, good condition	do	{ 1864 } { 1880 }	2	200	1,200	1,400
Do		Frame, poor condition	do	1864	2	(†)		
Brightwood		Frame, good condition	do	1865	1	500	1,200	1,700
Do		Frame, fair condition	do	1865	1	150	600	750
Mount Pleasant		Frame, good condition	do	1871	3	3,000	9,300	12,300
Columbia road		Brick, new	do	{ 1882 } { 1889 }	2	850	5,150	6,000
Mott	6th and Trumbull sts	Frame	do	{ 1871 } { 1882 }	10	4,000	17,428	21,428
Near Soldiers' Home		do	do	1868	2	400	1,600	2,000
Near Fort Slocum		do	do	1867	1	150	500	650
Bunker Hill road		Brick, new	do	1883	1	300	2,700	3,000
Old Bladensburg road		Frame, fair condition	do	1867	1	100	500	600
Bladensburg pike		Brick, new	do	1881	4	500	4,900	4,500
Near Benning's Station		Brick	do	1883	4	400	8,935	9,335
Anacostia road		Frame, fair condition	do	1864	1	200	600	800
Benning's road		Frame, good condition	do	1864	4	200	5,135	5,335
Uniontown		Brick, new	do	1881	6	1,500	6,837	8,337
Hillsdale		Frame, good condition	do	1871	6	1,000	5,000	6,000
Giesboro		Frame	do	{ 1864 } { 1877 }	2	300	1,000	1,300
Hamilton road		do	do	{ 1865 } { 1887 }	4	200	3,760	3,960
Murdock Road		Vacant lot	do			150		150
Colored Orphans' Home		Brick	do			(†)	40,000	40,000
Burrville		do	do	1888	1	435	1,750	2,185
Brightwood		do	do	1888	4	670	8,923	9,593
Monroe	Steuben, bet. 6th and 7th extended.	Brick, 70 by 84, 2 stories and basement	Furnace	1889	8	3,150	23,988	27,138
Birney	Hillsdale	Frame	Stoves	1889	4	1,200	6,926	8,126
Good Hope		do	do	1889	2	750	4,462	5,212
Van Buren	Jefferson st., Anacostia	Brick	Furnace		8		24,864	24,864

* United States ground.

† Unoccupied.

† Orphans' Home.

200 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

SUMMARY.

Total number of school buildings	\$96
Total number of rooms	710
Total value of sites	\$568, 254
Total value of buildings	2, 222, 772
Aggregate value	2, 791, 026

Inclosing grounds at the Arthur school building.

Appropriation	\$3, 175. 00
Contract No. 1378	\$1, 900. 00
Surveying	12. 50
Printing specifications	16. 20
Relaying sidewalk and extending pavements to new gateways.	18. 50
Extending wall	45. 54
	<u>1, 992. 74</u>

Balance of appropriation	1, 182. 26
--------------------------------	------------

The appropriation of \$22,000 for school repairs was expended as follows:

First division	\$2, 966. 86
Second division	2, 808. 52
Third division	2, 519. 36
Fourth division	2, 033. 57
Fifth division	1, 705. 32
Sixth division	2, 770. 96
Seventh division	2, 725. 92
Eight division	2, 978. 96
High school	1, 443. 07
Total	<u>21, 952. 54</u>

Balance	47. 46
---------------	--------

The limited appropriation for repairs and improvements to school buildings (there being in round numbers 100) does not admit of improvements, such as painting and kalsomining; to bring them up to a finished and thoroughly good condition, both interior and exterior, and to keep them thoroughly in good repair, so as to preserve them, is an economy. Their character is such that they should be well preserved, and also, as they are visited frequently by strangers from other cities contemplating the erection of school buildings, they should be presentable in every particular.

Additional stories on the fourth and sixth police station houses.

Appropriation	\$10, 000. 00
---------------------	---------------

Fourth police station :

Printing specifications	\$16. 20
Contract No. 1345	4, 121. 00
Extra work, as per order	397. 00
Putting in new bath rooms	190. 00
Running gas pipe in front room, second story	15. 60
Gas fixtures	40. 00

Total	<u>4, 779. 80</u>
-------------	-------------------

Sixth police station :

Printing specifications	16. 20
Contract No. 1343	4, 650. 00
Extra work, as per order	365. 00
Gas fixtures	29. 00

Total	<u>5, 060. 00</u>
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Total for fourth and sixth	9, 840. 00
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Balance of appropriation	<u>160. 00</u>
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REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 201

Constructing stables for the fifth and eighth police precincts.

Appropriation \$5,000.00

Fifth precinct :

Printing specifications	\$16.20
Surveying	2.50
Contract No. 1398	1,787.00
Extra work, as per orders	852.15
Wire guards	9.90
Concreting stable yard	105.00
Gas pipes and fixtures	12.13

Total 2,784.88

Eighth precinct :

Printing specifications	16.20
Contract No. 1393	1,773.00
Inclosing yard with wall and roof over yard	225.00
Concreting yard	60.00
Gas fixtures	1.50
Wire guards	7.50

Total 2,083.20

Total for fifth and eighth precincts \$4,868.08

Balance 131.92

The appropriation of \$2,000 for repairs to police station houses was expended as follows:

Appropriation \$2,000

Number 1	\$45.00
Number 2	195.99
Number 3	533.22
Number 4	67.90
Number 5	432.36
Number 6	170.14
Number 7	264.80
Number 8	32.35
Number 9	248.90

1,990.66

Balance 9.34

With the new seventh police station, now in course of erection, this department has an excellent class of houses. The needs of the department may want more extensive quarters as the city advances, but at this point they are well provided, except as stated by the chief of police, which is an additional story on No. 2 house and a stable for general use. They also need constant attention to keep them up to a comfortable and neat condition.

Constructing cell building and improving property adjacent to the police court building.

Appropriation \$3,500.00

Contract No. 1379	1,686.00
Superintendence	148.00
Surveying	10.00
Printing specifications	16.20
Extra work as per orders and bills	1,579.88

3,440.08

Balance 59.92

For the accommodation of an additional judge and jury at the police court a deficiency appropriation of \$300 was provided for repairs and furniture, and of this sum \$290.61 was expended.

For repairs to the police court building \$800 was appropriated, and of this sum \$794.50 was expended, leaving a balance of \$5.50.

For appliances for heating water and drying in three station houses an appropriation of \$375 was made, and the apparatus was placed in the third, fifth, and ninth precincts at an expenditure of \$195, leaving a balance of \$180.

The appropriation of \$550 for a new roof to the male workhouse was expended in executing this work.

An appropriation of \$22,000 was made for constructing a truck house, and the necessary furniture for the same, and of the above amount the following was expended through this office:

Expenses of chief engineer in inspecting fire houses in Eastern cities.....	\$42. 61
Contract	17, 470. 00
Printing specifications.....	22. 68
Drawing materials.....	5. 50
Draftsman.....	84. 00
Fence wall	391. 06
Sliding poles.....	116. 00
Extra sewer	10. 00
Gas main.....	18. 75
Meter connection	2. 50
Electric work.....	353. 85
Total.....	18, 516. 95

The appropriation of \$3,000 for the repair of engine houses was expended as follows:

Appropriation	\$3, 000. 00
Number 1.....	\$370. 00
Number 2.....	453. 22
Number 3.....	
Number 4.....	112. 60
Number 5.....	875. 66
Number 6.....	107. 97
Number 7.....	182. 13
Number 8.....	55. 39
Truck A.....	835. 43
Truck B.....	6. 50
	2, 998. 90
Balance.....	1. 10

The above houses are in a fair state of repair, but owing to the great wear they are subjected to, they need constant attention to keep them up. The new truck house, now completed and occupied, is the most complete and convenient fire-department house yet erected, and is a credit to the District.

An appropriation of \$250 was made for the repair and replacement of public scales, and of this amount \$47.77 was used.

The appropriation of \$4,200 for constructing ward at the Washington Asylum was entirely consumed, as follows:

Contract No. 1368.....	\$4, 185. 66
Printing specifications.....	14. 34
Total	4, 200. 00

Constructing addition with bathing appliances at male workhouse.

Appropriation	\$5, 850. 00
Printing specifications.....	\$32. 40
Contract No. 1394.....	5, 810. 00
	5, 842. 40
Balance	7. 60

Nine hundred dollars was appropriated for repairs to market houses, and \$865.66 was expended.

The limited appropriations each year for repairs to market houses has compelled me to expend the amounts on such items only as necessary to keep them in a working condition, neglecting almost entirely the preservation of their exteriors from the effects of the elements. There are three of them, two being very large buildings, and to repair wood and iron work and keep them from further decay the appropriations should not be less than \$1,500 each year, which will gradually bring them up and preserve their exteriors.

An appropriation of \$30,000 for the construction and completion of the Emergency Hospital was made, and a contract for this amount was entered into by the District for the construction of the building, which is not yet fully completed.

<i>Constructing bathing beach.</i>	
Appropriation	\$3, 000. 00
Contract No. 1449, for grading, \$940. 00, less \$115 retained, as noted below.	825. 00
Contract No. 1472, for wharves and bath houses	1, 160. 00
Contract No. 1478, for sand	650. 00
Miscellaneous items, as per bills and vouchers	360. 01
	2, 995. 01

The contractor for grading having abandoned the work before completing it, and he having been paid \$825, leaving a balance of \$115 due him, the District, besides this sum, expended also \$139.06 in straightening the surface of beach and correcting the work, the whole amount being included in the miscellaneous items noted above, and which amount, \$254.06, is certainly chargeable to him or his bond.

The following are the estimates for the year ending June 30, 1893, for the expenses of this office, the care of the District office building and the repairs of the various buildings under the supervision of this office:

Office of the inspector of buildings:

Salary of—

Inspector of buildings	\$2, 400. 00
Chief clerk and architect	1, 600. 00
One assistant inspector of buildings	1, 200. 00
One assistant inspector of buildings	1, 000. 00
One assistant inspector of buildings on elevators, fire escapes, and other duties	1, 000. 00
One clerk	900. 00
Messenger	480. 00
Contingencies, books, blanks, stationery, and livery of horse	575. 00
Total	9, 155. 00

Care of District office building—

One steam engineer	900. 00
One janitor	700. 00
Three laborers, at \$1.50 per day, in all 939 days	1, 408. 50
Total	3, 008. 50

Repairs:

Public-school buildings	30, 000
Police-station houses	3, 000
Fire-engine and truck houses	3, 500
Market houses	1, 500
Hay scales	250
Police-court building	800
Interior of District office building	500
Total for repairs	39, 550

204 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

The above estimates should not be reduced, as each estimate for repairs is as low as it can be placed to keep the buildings in a fair state of preservation. There should certainly be an increase of the salary of Mr. Brady, the chief clerk and architect, from \$1,600 to \$2,000, and each of the two assistants from \$1,000 to \$1,200, as the knowledge required to fill the positions and the amount of work performed by them is far in excess of the salary received.

Very respectfully,

THOS. B. ENTWISTLE,
Inspector of Buildings.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

OFFICE OF THE INSPECTOR OF BUILDINGS, *Washington, D. C., August 5, 1891.*

GENTLEMEN: The following are the estimates for the year ending June 30, 1893, for the expenses of this office, the care of the District of Columbia office building, and the repairs of the numerous buildings under the supervision of this office:

Office of the Inspector of Buildings;

Salary of—

Inspector of buildings.....	\$2,400.00
Chief clerk and architect	1,600.00
One assistant inspector of buildings	1,200.00
One assistant inspector of buildings	1,000.00
One assistant inspector of buildings, on elevators, fire escapes and other duties	1,000.00
One clerk.....	900.00
Messenger	480.00
Contingencies, books, blanks, stationery, livery of horse.....	575.00
Total.....	9,155.00

Care of the District office building:

One steam engineer.....	900.00
One janitor.....	700.00
Three laborers, at \$1.50 per day, in all 939 days.....	1,408.50
Total	3,008.50

Repairs:

Public-school buildings	30,000.00
Police-station houses	3,000.00
Fire-engine and truck houses	3,500.00
Market-houses	1,500.00
Hay scales	250.00
Police-court building	800.00
Interior of District of Columbia office building.....	500.00
	39,550.00

The above estimates should not be reduced, as each estimate is as low as they can be placed to keep the buildings in a fair state of preservation. There should certainly be an increase of the salary of Mr. Brady, the chief clerk and architect, from \$1,600 to \$2,000, and each of the two assistants from \$1,000 to \$1,200, as the knowledge required to fill the positions and the amount of work performed by them is far in excess to the salary received,

Very respectfully,

THOS. B. ENTWISTLE,
Inspector of Buildings.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

K.

REPORT OF THE CORONER.

CORONER'S OFFICE, DISTRICT OF COLUMBIA,
Washington, July 31, 1891.

GENTLEMEN: In compliance with your request I have the honor to transmit the inclosed tabular statement of the transactions of this office for the year ended June 30, 1891. Also an estimate of the sums needed for the maintenance of the same for the year ending June 30, 1893.

Respectfully,

D. C. PATTERSON,
Coroner.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

Statement of deaths certified by the coroner during the year ending June 30, 1891.

Willful violence:

Suicides—

By asphyxia.....	11
By drowning.....	3
By gunshot wounds.....	12
By incised wounds.....	3
By poisons.....	6

Homicides—

By erysipelas.....	1
By fracture of skull.....	5
By gunshot wounds.....	1
By infanticide.....	2
By punctured wounds.....	3

Accidents and negligence:

Asphyxia.....	9
Burns.....	1
Concussion of brain.....	2
Drowned.....	28
Fall from window.....	1
Fracture of ribs.....	1
Fracture of skull.....	13
Fracture of vertebra.....	3
Gunshot wounds.....	2
Neglect at birth.....	13
Poisons (narcotic).....	2
Railroad accidents.....	5
Run over by herdic.....	1
Stillbirth.....	35
Shock.....	2

Diseases:

Bronchorrhea.....	2
Cancer.....	1
Capillary bronchitis.....	24
Catarrhal fever.....	1
Cerebral congestion.....	3
Cerebral hemorrhage.....	5
Cerebritis.....	1
Convulsions.....	3
Convulsions (infantile).....	19

Diseases—Continued.

Cholera infantum.....	29
Colic.....	1
Congestive chill.....	2
Congenital debility.....	27
Chronic diarrhea.....	1
Diarrhea.....	13
Dropsy.....	7
Diphtheria.....	3
Epilepsy.....	4
Exhaustion.....	3
Gangrene.....	1
Gastro-enteritis.....	1
Heart disease.....	38
Hemorrhage from bowels.....	1
Hemorrhage from stomach.....	1
Inanition.....	29
Malarial fever.....	1
Measles.....	1
Paralysis.....	7
Pertussis.....	1
Pneumonia.....	27
Phthisis.....	25
Pulmonary congestion.....	25
Pulmonary hemorrhage.....	5
Puerperal convulsions.....	1
Pyæmia.....	1
Remittent fever.....	1
Sunstroke.....	1
Senile debility.....	8
Syphilis.....	1
Teething.....	1
Tonsilitis.....	1
Thursh.....	2
Trismus nascentium.....	15
Typhoid fever.....	1
Unknown.....	15
Uræmia.....	3

Total male deaths.....	316
Total female deaths.....	212

Causes of death, color, age, etc.

Causes of death.	Total deaths.	White.		Colored.		Under 1 month.	Between 1 month and 1 year.	1 to 5 years.	5 to 10 years.	10 to 20 years.	20 to 30 years.	30 to 40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 to 80 years.	80 to 90 years.	90 to 100 years.	Unknown.
		Male.	Female.	Male.	Female.														
Zymotic diseases	62	4	2	30	26	1	32	16	2	...	4	1	2	...	3	...	1	...	...
Constitutional diseases	101	13	9	41	38	18	35	6	...	2	7	3	8	4	7	3	3	5	...
Local diseases	150	31	14	55	50	3	28	7	2	9	10	11	28	24	19	7	2	...	...
Developmental diseases	46	4	5	24	13	32	12	2	...	...	...	...	...	...	...	...	...	...	...
Violence	119	58	7	35	19	10	3	3	7	17	25	15	13	12	8	4	2	...	...
Stillbirth	35	1	3	11	20	35	...	...	...	...	...	...	...	...	...	...	...	...	...
Unknown	15	5	3	4	3	...	...	...	...	...	...	...	...	...	...	...	...	...	15
Total	528	116	43	200	169	99	110	34	11	28	46	30	51	40	37	14	8	5	15

Causes of death.	Nativity.									
	District of Columbia.	Other parts of the United States.	Spain.	Germany.	Ireland.	Scotland.	England.	France.	Unknown.	Total.
Zymotic diseases	40	20	...	...	1	...	...	...	...	...
Constitutional diseases	68	29	...	2	2	...	...	...	1	...
Local diseases	63	68	...	4	7	2	1	...	4	...
Developmental diseases	45	1	...	...	...	...	...	...	...	...
Violence	39	57	1	7	4	...	3	1	8	...
Stillbirth	35	...	...	...	...	...	...	...	...	...
Unknown	15	...	...	...	...	...	...	...	...	...
Total	305	175	1	13	14	2	4	1	13	528

Occupations.

Occupation.	No.	Occupation.	No.	Occupation.	No.	Occupation.	No.
Agent	1	Commission mer-	...	Mariner	1	Sexton	1
Apprentice	1	chant	1	Merchants	2	Shoemakers	3
Architect	1	Cook	1	Messenger	1	Stonecutters	2
Bakers	2	Draftsman	1	Miner	1	Soldiers	9
Barbers	2	Drivers	6	Newsboy	1	Student	1
Bartender	1	Electrician	1	Nurse	1	Tailor	1
Blacksmith	1	Farmers	3	Painter	1	Teachers	2
Bricklayers	4	Farrier	1	Printer	1	Unknown	10
Book agent	1	Fireman	1	Porter	1	Wheelwright	1
Boothblack	1	Gardener	1	Photographer	1	Waiter	1
Builder	1	Housekeepers	21	Railroad man	1	Whitewashers	4
Carpenters	7	Laborers	52	Stableman	1	None	314
Charmaker	1	Laundresses	10	Cigar-maker	1	Total	528
Charlatan	1	Lawyers	4	Seamstress	1		
Clerks	23	Machinist	1	Servants	12		

Social relation above the age of 20 years.

Sex and color.		Widow or widower.	Married.	Single.	Total.
White, male		18	38	30	86
White, female		10	14	3	27
Colored, male		3	39	23	65
Colored, female		20	17	19	56

Monthly mortality.

July	57	February.....	30
August	42	March.....	43
September	43	April.....	49
October	46	May.....	47
November.....	35	June.....	51
December	41		
January.....	44	Total mortality	528

SUMMARY BY TOTALS.

Suicides.....	35
Homicides	10
Infanticides	2
By accidents and negligence.....	83
By disease	363
Stillbirths	35

Total of all cases certified by coroner..... 528

Whole number of white deaths 159 = 30 per cent.
 Whole number of colored deaths 369 = 70 per cent.

Estimate for the maintenance of the coroner's office for the year ending June 30, 1893.

For salary of coroner	\$1,800
For contingent expenses, including payment of jurors, for making autopsies, for horse hire or livery, and for the removal of deceased persons.....	900
For services in care of the (including ice for the preservation of) bodies awaiting identification.....	300
Total	3 000

L.

REPORTS OF INSPECTORS AND MEASURERS OF LUMBER.

WASHINGTON, D. C., *July, 1891.*

GENTLEMEN: I herewith respectfully submit a detailed statement of the operations of my office for the fiscal year ending June 30, 1891:

Quantities and kinds of lumber measured and inspected.

	Feet.
Number feet yellow pine lumber.....	7, 601, 203
Number feet poplar lumber.....	35, 063
Number feet oak lumber.....	6, 872
	7, 643, 138
7,643,138 feet, at 30 cents per M.....	\$2, 292. 94

Very respectfully,

THOS. R. RILEY,
Lumber Inspector.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

WASHINGTON, D. C., *June 30, 1891.*

I most respectfully submit for your consideration the amount of lumber measured and inspected by me for the year ending June 30, 1891:

From all sources:

	Feet.
Merchantable	6, 827, 364
Condemned	250, 241

Respectfully, yours, etc.,

GEO. Z. COLISON,
Inspector and Measurer of Lumber.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

WASHINGTON, D. C., *July 2, 1891.*

GENTLEMEN: I have the honor to report that I have measured and inspected 3,692,041 feet of lumber during the last fiscal year.
Respectfully submitted.

E. CHAMPLIN,

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

GEORGETOWN, D. C., *July 3, 1891.*

THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA:

I have the honor to report having measured the following:

April, 1891, 398,416 feet of Virginia pine, at 30 cents per M.....	\$119.52
Expenses	8.00
	111.52
May, 1891, 376,975 feet of Virginia pine, 111,610 feet of Georgia pine.....	146.57
Expenses	18.00
	128.57
June, 1891, 507,864 feet of Virginia pine.....	152.35
Expenses	19.00
	133.35
Inspection of 1,394,865 feet, at 30 cents per M.....	418.45
Expenses	45.00
	373.45

EDW. J. DAW,
Inspector for Georgetown, D. C.

M.

REPORTS OF INSPECTORS AND MEASURERS OF FIREWOOD.

WASHINGTON, D. C., July 1, 1891.

GENTLEMEN: Please find inclosed my annual report of inspection and measurement of wood, as requested by your circular of June 1, 1891.

Very respectfully,

A. W. EATON,
Inspector and Measurer of Wood,
Anacostia District, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

Statement of wood inspected and measured in Anacostia district from July 1, 1890, to June 30, 1891, inclusive.

Year.	Pine.	Oak.	Total.	Amount received, at 9 cents per cord.
1890.				
July	1,080½	55½	1,136	
August	1,025	131	1,156	
September	602½	180½	782½	
October	489	105	594	
November	546	123½	669½	
December	347	63½	410½	
1891.				
January	4½	6	10½	
February	108½		108½	
March	235½	41½	277½	
April	259½	29½	288½	
May	605½	28½	634½	
June	753	50	803	
Total			6,870½	\$618.37

WASHINGTON, D. C., July 1, 1891.

GENTLEMEN: I have the honor to acknowledge the receipt of your communication of June 1, 1891, and would state that during the fiscal year ending June 30, 1891, I inspected and measured in the Rock Creek district 7,408 cords of wood, divided during the year as follows: July, 1890, 752 cords; August, 845 cords; September, 838 cords; October, 775 cords; November, 624 cords; December, 405 cords; January, 1891, no wood arrived; February, 454 cords; March, 246 cords; April, 572 cords; May, 974 cords; June, 924 cords; total, 7,408 cords.

The arrival of wood-laden vessels were about equally divided between the States of Maryland and Virginia and came via the Potomac River. No wood has arrived via the C. and O. canal since the freshet of June, 1889.

Very respectfully,

HENRY BURROWS,
Inspector and Measurer, Rock Creek District.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

WASHINGTON, D. C., *July 25, 1891.*

GENTLEMEN: I most respectfully report that I have inspected and measured in the Potomac district, for the year ending June 30, 1891, 22,526 $\frac{3}{4}$ cords of wood.

Very respectfully, your obedient servant,

W. A. O'MEARA,
Inspector and Measurer, Potomac District.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

N.

REPORT OF INSPECTOR OF FUEL.

WASHINGTON, D. C., *July 1, 1891.*

GENTLEMEN: As inspector of fuel for District of Columbia, I submit herewith my report for June, and also my annual report for year ending June 30, 1891. I inspected, weighed, and measured for June, 260 tons coal, at 20 cents per ton, \$52, and 10 cords wood, at 9 cents per cord, 90 cents; total amount received for month, \$52.90.

For the year ending June 30, 1891, I inspected, weighed, and measured 7,266 tons coal and 388 cords wood. Total amount received during year, \$1,488.11.

Very respectfully,

WM. M. DOVE,
Inspector Fuel, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

O.

REPORT OF INSPECTORS OF FLOUR.

GEORGETOWN, D. C., *July 1, 1891.*

SIRS: The following is an annual report of the work done in the flour inspector's office of Georgetown during the fiscal year ending June 30, 1891:

Flour inspected during the year, 42,177 barrels. The amount inspected is less than last year. Messrs. Cropley & Herr retired from the milling business during the past year; that accounts for the falling off.

I received as fees 1 cent per barrel from the owner of the flour and average 25 pounds of flour to every one hundred barrels inspected.

Fees received	\$421. 77
Sold flour	236. 21
	657. 98

Expenses during the year paid out of the income amount to \$389.60.

Respectfully,

JACOB F. STAUB.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

DEPARTMENT OF FLOUR INSPECTION,
Washington, D. C., July 2, 1891.

GENTLEMEN: Inclosed please find my report showing the amount of fees received by me, together with amount of expenses incurred for the months of March, April, May, and June, 1891:

Month.	Receipts.	Expenses.
March	\$314	\$78. 00
April	322	82. 73
May	246	73. 00
June	267	90. 00
	1, 149	323. 73

Total amount of flour inspected for the year ending June 30, 1891, 122,684 barrels.

Respectfully, your obedient servant,

JAMES H. WELCH.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

P.

REPORT OF COMMISSIONERS OF FLOUR INSPECTION.

WASHINGTON, D. C., *December 31, 1891.*

GENTLEMEN: We have not been called upon to render any service during the past year as flour commissioners.

BENJ. CHARLTON,
GEO. W. CISSELL,
Flour Commissioners.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

Q.

REPORTS OF THE MARKET MASTERS.

WASHINGTON, D. C., *July 7, 1891.*

GENTLEMEN: The following is a statement of the transactions of the Western Market for the year ending June 30, 1891:

July, 1890	\$531.50
August, 1890	516.40
September, 1890	522.50
October, 1890	516.50
November, 1890	522.40
December, 1890	522.50
January, 1891	516.50
February, 1891	519.50
March, 1891	516.50
April, 1891	509.00
May, 1891	509.00
June, 1891	518.90
Total	6, 221.20

It will require, to provide properly for the efficiency of the market, \$1,780; market master's salary, \$1,200; to provide a watchman for the market, \$480 (there being none), and I have been compelled to provide one out of my own salary, at a cost of \$22 per month, the dealers in the market raising the other \$18 by subscription; also \$100 per year for laborer. I have more market to look after and keep clean than the other two combined, as the receipts will show, as they are \$1,488.70 greater than the two, and yet this market receives no more for its support than they. The market is in miserable repair. The roof is so high that it is impossible to get to it to properly clean it. It requires a ceiling put in to shut out the dingy roof; it also leaks. The fence leading to the market yard is entirely down; the iron railing around the market is in a dangerous condition, the doors all need repairing, the windows need fixing so the market can be ventilated, the whole interior needs painting, the floor is gone and a new one needed in the worst way. The fish stands are in the market proper, which should not be. There are two rooms at present useless. It will require at least \$5,000 to put the market in condition to meet the wants of the dealers as well as the patrons, as it is situated in the center of the West End and patronized by a class of people who require a first-class market. Should the repairs I ask for be given, I think I can safely promise to bring up the receipts to \$7,000 per year, as there are now vacant butcher stands which will rent, if the fish stands are removed to the court yard, for \$452 per year, and the space now occupied by the fish

will rent for \$288 per year, and the space occupied by these useless rooms mentioned will rent for \$216 per year, making an increase of \$936 per year.

Respectfully submitted.

J. ELDRIDGE BURNS,
Market Master, Western Market.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

EASTERN MARKET,
Washington, D. C., June 27, 1891.

GENTLEMEN: In compliance with your request of June 1, 1891, I herewith transmit the amount required for the conduct of this office for the fiscal year ending June 30, 1893.

For market master.....	\$1,200
For watchman	100
	1,300

I respectfully recommend that the woodwork be painted, brickwork pointed up, and roof repaired. I regard these repairs as necessary for the proper preservation of this building.

Very respectfully,

ROBT. H. LUSBY,
Market Master.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

EASTERN MARKET,
Washington, D. C., June 27, 1891.

GENTLEMEN: In compliance with your request of June 1, 1891, I herewith transmit a detailed statement of the operations of this market for the fiscal year ending June 30, 1891:

Rents collected from—	
Butcher stands.....	\$972
Butter stands	336
Bacon stands.....	192
Miscellaneous stands	226
Huckster stands	1,548
Fish stands	144
Extra gas.....	30
Total as per monthly reports.....	3,448

Very respectfully,

ROBT. H. LUSBY,
Market Master.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

GEORGETOWN, June 25, 1891.

GENTLEMEN: I have the honor to transmit to you a detailed statement of the operations of the Georgetown market for the fiscal year

ended June 30, 1891; also the amount required for the conduct and the support of the market for the fiscal year ending June 30, 1893:

Class of stands:

Huckster	24
Butcher	18
Bacon	4
Bread	6
Butter	6
Tea and coffee	2
Total	<u>60</u>
Monthly rent	\$2. 16
Number rented	40

RECEIPTS.

Rent of stands	\$1, 090. 80
Extra gas	7. 20
Rent of hall	120. 00
Sale of four fish stands	66. 50
Total	<u>1, 284. 50</u>

EXPENSES.

Salary of market master	\$900. 00
Salary of laborer at market	100. 00
Amount of gas bill	84. 75
	<u>1, 084. 75</u>
Balance	199. 75

ESTIMATES FOR THE FISCAL YEAR ENDING JUNE 30, 1893.

Salary of market master	\$900. 00
Salary of laborer at market	100. 00
Fuel, gas, and brooms	100. 00
	<u>1, 100. 00</u>

Very respectfully,

W. H. WILLIAMS,
Market Master.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

R.

SEALER OF WEIGHTS AND MEASURES.

WASHINGTON, D. C., *August 6, 1891.*

GENTLEMEN: I have the honor to submit the following report for the year ending June 30, 1891:

I made 4,414 inspections of scales and measures. The total amount of fees received were \$2,891.35, and the expenses were \$1,886.50. I condemned 8 measures and 3 scales.

During ten months of the year my inspections covered only one-half of the city; the last two months the whole city, including Georgetown.

I am pleased to report that a much smaller number of scales and measures have been found incorrect than the year previous, and a much smaller number condemned. I wish to respectfully call attention to the fact that very little attention in the past has been given to fixing a legal weight and measure for much of the produce sold here. Nearly all the States have passed laws regulating the weights and measures on all the products in which their State was interested. It is important for the protection of buyers that this should be done, especially corn in the ear should be sold by weight. And there is much complaint about oyster measures. The neighboring States use a measure which holds about five pecks, which they call an oyster bushel measure. When the oystermen sell to our dealers they use the standard bushel measure, thus giving a peck less for a bushel than they originally receive.

I would also respectfully recommend that hereafter when the District scales are rented, that no promise shall be made in advance that they can be removed by whosoever shall happen to rent them, to a new location, as it is very damaging to the scales to move them after having been set for sometime.

I would also call attention to the fact that better facilities are needed for the protection of the produce of the farmers which is brought here for wholesale; at the present time it has to be unloaded on the sidewalk, exposed to the sun and rain, and sometimes being allowed to stay there for a day and a night, and when sold after such exposure is not always in a healthy condition. Sheds should be provided. The farmers would much prefer their present location on the south side of B street NW. above Seventh street, but there is not room to accommodate all that come there during the summer season. Therefore unless a double row of sheds could be erected on that street, some other location should be selected.

Very respectfully,

FRANK ALDRICH,
Sealer of Weights and Measures.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

S.

REPORT OF THE HARBOR MASTER.

OFFICE OF THE HARBOR MASTER,
Washington, D. C., October 1, 1891.

SIRS: The following report of the operations of this office and its expenditures for the fiscal year ending June 30, 1891, together with the estimates for the fiscal year ending June 30, 1893, is respectfully submitted.

Appropriation for fiscal year ending June 30, 1891..... \$3,500.00

Expended as follows:

For salaries.....	\$990.00
Fuel.....	275.62
Boiler and repairs to same.....	1,244.65
Insurance on boat and office.....	52.25
New office.....	224.00
Ice for boat.....	13.00
One lifeboat.....	115.00
Miscellaneous supplies.....	577.08

Total..... 3,491.60

Unexpended balance..... 8.40

Estimates of appropriations for fiscal year ending June 30, 1893.

One engineer.....	\$840.00
One fireman.....	480.00
One watchman.....	300.00
Fuel.....	500.00
Rent of wharf.....	120.00
Repairs to boat.....	500.00
Removing obstructions.....	500.00
Paints, oils, waste, etc.....	260.00

Total..... 3,500.00

Your attention is particularly called to the necessity of a suitable place for the use of the harbor and police boat, for the rental of which an appropriation of \$120 is asked. As was stated in my last annual report, we are entirely dependent upon wharf owners for a place of anchorage, a condition of affairs which occasions much inconvenience both to ourselves and the owners upon whose gratuity we are dependent. It must, I think, be conceded that frequent changes of anchorage places are detrimental to the service.

As will be seen in my report to the major and superintendent of Metropolitan police, the boat and its crew have rendered much valuable service during the past fiscal year. The demands for its use are yearly increasing and to such an extent that I am compelled, by a sense of duty, to renew the recommendation in my last annual report that a boat suitable for all purposes be promptly purchased and equipped. The appended tabulated statement shows an increase of shipping, besides much activity is being displayed in the purchase of new boats for

traffic and travel upon the Potomac, all of which tends to demonstrate the necessity of increasing the facilities for the better protection of the lives and property of those engaged in river pursuits. It is therefore recommended that an appropriation of \$80,000 be asked, apportioned as follows:

For the construction of an iron boat provided with fire shields, relay pumps, etc.....	\$60,000
Harbor master in charge, per annum	1,500
Two pilots, at \$1,080 per annum.....	2,160
One engineer	1,080
Do	900
Three firemen and coalheavers, at \$600 each	1,800
Eight deck hands, at \$480 each.....	3,840
One clerk.....	780
Joe Blackburn, as auxiliary to boat	2,000
1,095 tons of coal	4,380
200 gallons of lard oil.....	150
100 gallons of cylinder oil.....	60
10 cords of wood.....	60
400 pounds of cotton waste	32
Miscellaneous supplies	1,258

To further promote the efficiency of the service it is suggested that an appropriation of \$1,605 be requested and apportioned as follows:

For the purchase of a 110-light dynamo machine	\$415
Engine to run the same	350
Search light	250
Wiring the boat and placing 50 lights.....	150
Freight.....	25
Belt	15
Gong.....	150
Telephone and gong circuit	250

That many disastrous fires have occurred and thousands of dollars' worth of property have been destroyed which could have been prevented by the use of such a boat as herein estimated for is an undisputed fact. A fire of recent date plainly demonstrated that one of the most efficient of fire departments was rendered practically useless on account of little, or, I might say, no facilities to battle with extensive conflagrations. A valuable boat was sacrificed in order that other shipping might be saved, whereas if the District had been possessed of the proper appliances for such emergencies a trifling loss only would have been the result.

In submitting these facts and figures I would earnestly suggest for them a careful consideration, as this long-felt want should be supplied as speedily as possible.

The following tabulated statement, showing by months the arrival and departure of boats, together with specifications of cargoes carried, and also a list of steam and tug boats plying upon the Potomac, is herewith submitted.

Respectfully,

J. R. SUTTON,
Harbor Master.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 221

Statement showing by months material which composed cargoes of sailing vessels landing in the harbor of Washington during the fiscal year ending June 30, 1891.

Cargoes.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Asphalt.....tons		1,000	900	990		
Ballusters.....number	10,000					
Canned fruit.....cases			5,000		6,800	2,350
Cement.....barrels		2,500			700	600
Coal (hard).....tons	14,482	8,123	9,515	5,290	15,280	7,206
Cedar posts.....number	2,400					500
Corn.....bushels	2,800	3,000				
Fertilizer.....tons		106				
Guano.....do		1,110				
Gravel.....do	300	200	175	400	225	
Hay.....bales				600	400	
Ice.....tons	19,639	16,413	16,744	6,210	19,396	900
Iron pipe (water).....do	250	150				
Iron (pig).....do						100
Kennet.....do						
Lime.....barrels		2,687				
Lumber.....feet	2,095,000	2,225,000	2,620,000	2,035,000	2,582,000	1,222,000
Laths.....number	3,135,000	1,669,000				
Melons.....do	35,900	31,600	13,200			
Marble dust.....barrels						100
Oysters.....bushels			20,975	48,200	45,300	63,000
Phosphate.....tons			562			
Plaster.....barrels	1,670					1,500
Railroad ties.....number		500			1,500	2,880
Stone.....tons	1,025	212	978	790	1,800	1,980
Shingles.....number	275,000	50,000	138,000	5,542,000		7,000
Sweet potatoes.....barrels		300	266		190	
Wood.....cords	3,990	4,602	5,720	3,780	2,505	3,575
Wheat.....bushels	1,100				7,000	2,200
White sand.....tons	250	500				

Cargoes.	Jan.	Feb.	Mar.	Apr.	May.	June.	Total.
Asphalt.....tons	575	1,483	900	1,900			7,748
Ballusters.....number							10,000
Canned fruit.....cases							14,150
Cement.....barrels					986		4,786
Coal (hard).....tons	500			6,490	9,957	17,291	94,134
Cedar posts.....number					400		3,300
Corn.....bushels			4,000	3,000	6,000	7,000	25,800
Fertilizer.....tons			200	210	300		816
Guano.....do							1,110
Gravel.....do			300	600	700	500	3,400
Hay.....bales							1,000
Ice.....tons				3,936	26,820	10,193	120,253
Iron pipe (water).....do							400
Iron (pig).....do							100
Kennet.....do					200		200
Lime.....barrels							2,687
Lumber.....feet	250,000	775,000	3,300,000	3,647,000	3,535,000	3,620,400	27,936,400
Laths.....number					4,765,000	186,000	9,758,000
Melons.....number							80,700
Marble dust.....barrels							100
Oysters.....bushels	47,000	38,000	41,000	23,600	4,200		331,275
Phosphate.....tons							562
Plaster.....barrels						2,200	5,370
Railroad ties.....number				1,800			6,680
Stone.....tons					700	2,680	6,785
Shingles.....number			2,000,000	500,000	1,479,000		9,991,000
Sweet potatoes.....barrels							756
Wood.....cords	820	975	2,259	2,119	4,670	4,305	39,350
Wheat.....bushels			5,200	1,700	1,400	1,670	20,360
White sand.....tons				300	225	600	1,875

222 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

List of steam vessels plying upon the Potomac River.

Name of boat.	Service.	Name of boat.	Service.
STEAMBOATS.		TUGBOATS—continued.	
Washington	Washington to Norfolk.	Potomac	Towing on the river.
Norfolk	Do.	Jas. Jackson, jr.	Do.
Lady of the Lake	Do.	Ella Pierce	Do.
Jane Mosely	Do.	Zila	Do.
Sue	Washington to Balti- more.	Fannie Gilbert	Do.
Tygert	Do.	Amanda Powell	Do.
Hattie	Do.	Chipox	Do.
Wakefield	River landings.	Occoquan	Do.
John W. Thompson	Do.	Hercules	Do.
Mattano	Do.	D. M. Key	Do.
Chas. Macalester	Mount Vernon.	Anteros	Do.
City of Washington	Washington to Alex- andria.	Thomas Venner	Do.
City of Alexandria	Do.	Lonides	Do.
George Leary	Excursions.	Peerless	Do.
Excelsior	Do.	Arlington	Do.
Sam'l J. Pentz	Do.	Mars	Do.
Pilot Boy	Do.	Kate Connor	Do.
T. V. Arrowsmith	Do.	Americus	Do.
George Law	Do.	Curfew	Do.
Mary Washington	Do.	Triton	Do.
Bartholdi	Do.	Wm. S.	Do.
Corcoran	Do.	D. S. Stettson	Do.
Cecil	Do.	John Alexandria	Do.
Bell L.	Do.	Chas. J. Brady	Do.
Little Nell	Do.	Chesapeake	Do.
TUGBOATS.		Goldsmith Maid	Do.
Hattie	Towing on the river.	A. P. Gorman	Do.
Jos. Zane	Do.	Gilmor Meredith	Do.
Jas. Richards	Do.	Geo. W. Pride	Do.
Templar	Do.	Virginia Earman	Do.
Gen. Hunt	Do.	Volunteer	Do.
Sampson	Do.	Dandy	Do.
Burdsell	Do.	Gen. Dumont	Do.
		Wm. Orison	Do.
		Rob't Turner	Do.
		Debos Lenox	Do.
		Joe Blackburn	Police and harbor boat.

Statement showing by months the arrival of boats in harbor of Washington, together with specifications of cargoes carried during the fiscal year ending June 30, 1891.

Cargoes.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	Total.
Asphalt		1	1	2			1	3	1	2			11
Balusters	1												1
Canned fruit			2		3	1							6
Cement		1			1	1							3
Coal (hard)	61	38	45	24	63	23	1			12	33	61	361
Cedar posts	2					2					1		5
Corn	2	2							4	3	4	5	20
Fertilizer		1								1	1	1	4
Guano		1											1
Gravel	1	1	1	1	1				1	2	2	2	12
Hay				1	1								2
Ice	18	14	15	6	18	1				2	10	10	94
Iron pipe	1	1											2
Iron (pig)						1							1
Kennet													1
Lime		1									1		1
Lumber	34	19	26	16	19	13	2		6	23	31	40	229
Laths	6	2									2	2	12
Melons	13	23	5										51
Marble dust					1								1
Oysters			52	116	105	96	81	88	43	44	12		637
Phosphate		1											1
Plaster	1					1							1
Stone	2	1	2	2	4	4						1	3
Shingles	2	1	2	3		1					1		16
Sweet potatoes		2	1						2	1	4		16
Ties (R. R.)		1			1								4
Wood	101	110	147	66	2	2					2		7
Wheat	1				64	81	15	13	60	75	120	115	967
White sand	4	5			4	2			3	2	1	2	15
										3	3	7	22

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 223

Statement showing by months the departure of boats from harbor of Washington, with specifications of cargoes carried during the fiscal year ending June 30, 1891.

Months.	Stone.		Compost.		Boats removed to keep docks and channels cleared.
	Vessels.	Tons.	Vessels.	Tons.	
July	5	2,900	24	2,700	41
August	3	700	35	4,100	30
September	1	300	17	2,500	22
October			5	725	20
November					7
December					30
January					4
February					3
March			2	300	15
April	1	250			20
May					32
June			1	160	20
Total	10	4,150	84	10,485	244

T.

REPORT OF SUPERINTENDENT OF STREET AND ALLEY CLEANING SERVICE.

WASHINGTON, D. C., August 1, 1891.

GENTLEMEN: I have the honor to submit herewith my annual report regarding the operations of the street and alley cleaning service of the District of Columbia for the fiscal year ending June 30, 1891. In accordance with your instructions I also submit estimate of expense for the fiscal year ending June 30, 1893, together with such other details as I believe essential and for the good of the service.

Area of streets and alleys cleaned, and cost.

Months.	Cleaned.		Area improved.		Débris removed.
	Area.	Cost.	Alleys cleaned.	Cost..	
1890.					
	<i>Square yards.</i>		<i>Sq. yards.</i>		<i>Cu. yards.</i>
July	14, 677, 616	\$5, 137. 17	958, 158	\$277. 87	11, 068
August	15, 969, 442	5, 589. 30	1, 816, 589	526. 81	11, 542
September	19 684, 132	6, 889. 44	1, 702, 376	493. 68	13, 832
October	20, 378, 335	7, 132. 42	1, 321, 766	383. 32	15, 833
November	20, 085, 287	7, 029. 85	1, 745, 867	506. 30	17, 364
December	12, 796, 111	4, 478. 64	1, 090, 791	316. 34	9, 000
1891.					
January	14, 792, 972	5, 177. 54	1, 142, 737	331. 40	10, 936
February	12, 650, 291	4, 427. 60	1, 031, 185	299. 05	8, 884
March	10, 674, 985	3, 736. 24	961, 894	278. 96	7, 120
April	17, 160, 683	6, 006. 24	1, 923, 488	557. 82	12, 304
May	15, 981, 747	5, 593. 61	1, 957, 526	567. 68	12, 142
June	12, 677, 537	4, 437. 14	1, 574, 931	456. 75	10, 074
Total	187, 529, 138	65, 635. 19	17, 227, 308	4, 995. 98	140, 099

Removing snow, ice, etc.

Date.	Nature of work.	Cash.
December, 1890	Removing snow and ice from streets and avenues	
January, 1891	do	\$648. 46
March, 1891	Removing snow and slush from streets and avenues	165. 53
	Total	170. 47
		984. 46

UNIMPROVED STREETS AND ALLEYS.

The unimproved streets and alleys of the District were cleaned during the past fiscal year by hand labor, employed by the District government through this department. Connected with this work is the cleaning of gutters and sidewalks, the cutting out of weeds and grass, and the removal of earth and sand caused by washes, and attending to all

complaints from citizens relative to any temporary obstruction of streets and alleys.

From the fact that the labor performed by the different labor gangs is so varied in character, it is not possible to give in detail the amount of work performed, as no exact measurements could be taken of areas cleaned, and as so much time is consumed in passing from one point to another to attend to complaints, or wherever their services are required, I can therefore only submit a statement showing the character and nature of force engaged on this work, number of days each class worked, pay per diem, and total cost. I however append the number of cubic yards of material or débris removed by said gangs during the time employed, which will give a partial idea of the amount of work performed, the same being 52,860 cubic yards:

Labor roll for 1890-'91.

Nature of force.	Days.	Rate per day.	Cost.
Foremen	559½	\$3. 00	\$1, 648. 50
Assistant foremen	674	2. 50	1, 685. 00
Horses and carts	1, 616½	2. 00	3, 232. 50
Laborers	7, 053	1. 50	10, 579. 50
Water boys	181½	1. 00	181. 50
Two-horse sprinkler (service ordered by Commissioners)	12	3. 00	36. 00
Total			17, 363. 00

The following statement shows the time employed and the amounts paid superintendent, assistant superintendent, inspector, etc.:

Roll.	From—	To—	Days.	Per diem pay.	Cost.
One superintendent	July 1, 1890	Sept. 30, 1890	92	\$4. 00	\$368. 00
Do	Oct. 1, 1890	June 30, 1891	271	5. 00	1, 355. 00
One assistant superintendent (also clerk) ..	July 1, 1890	Sept. 30, 1890	92	4. 00	368. 00
Do	Oct. 1, 1890	June 30, 1891	273	4. 50	1, 228. 50
Do	Aug. 19, 1890	do	299	3. 50	1, 046. 50
One inspector (streets and avenues)	July 1, 1890	Nov. 30, 1890	153	3. 00	459. 00
Do	Dec. 1, 1890	June 30, 1891	212	3. 50	742. 00
Do	May 1, 1891	do	61	3. 00	183. 00
Two inspectors (improved alleys)	July 1, 1890	do	626	3. 00	1, 878. 00
One messenger	do	do	318	50	477. 00
Use and livery of horse furnished by assistant superintendent	Sept. 1, 1890	do	292	2. 00	584. 00
Use and livery of horse furnished by inspector	Feb. 5, 1890	do	125	1. 00	125. 00
Total					8, 814. 00

Recapitulation of expense for fiscal year 1891.

Cost of cleaning streets and avenues, 187,529,138 square yards, at 35 cents per 1,000 yards	\$65, 635. 19
Cost of cleaning improved alleys, 17,227,308 square yards, at 29 cents per 1,000 yards	4, 995. 98
Amount paid for labor on unimproved streets and alleys, gutters, sidewalks, cutting weeds, removing washings, and attending to complaints by citizens	\$17, 363. 00
Cost of removing snow and ice	984. 46
Amount paid superintendent, assistants, clerk, messenger, etc	8, 814. 00
	97, 792. 63
Amount paid out on account of contingent expenses for horses, tools, repairs, stationery, printing, furniture for office, etc	1, 542. 29
Total	99, 334. 92

226 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

STATEMENT OF ACCOUNT.

Amount appropriated for fiscal year 1891-'92	\$100,000.00
Expended as per foregoing statements.....	99,334.92
Balance on hand and unexpended	665.08

Since the close of the last fiscal year the number of streets and avenues swept daily, triweekly, and semiweekly have been increased to the full extent the appropriation would warrant, having at the same time due consideration for work required in other branches of the service. The increased area swept is shown by the following figures: In 1890, total area streets and avenues swept was 162,703,191 square yards; in 1891 there was swept, as stated, 187,529,158 square yards, being an increase of 24,825,947 square yards. The service on the improved alleys has not been increased, but a larger area has been cleaned by reason of the paving of old and opening up of new alleys, the area swept during present fiscal year being 17,222,308 square yards, as against 16,080,583 square yards in the preceding year, being an increase of 1,146,725 square yards.

The work on the unimproved streets and alleys has increased, owing to the increased building throughout the city and the consequent demand for the opening up of new streets and alleys. The growth of this class of work is also brought about by the opening up or extension of suburban streets. As I have already stated, it is almost impossible to give the amount and nature of this work in detail, for the reasons stated; I can not, therefore, show the actual increase of work performed during present fiscal year over that of 1890.

While the service has been increased in many localities and larger areas are now being swept than ever before, such has been the growth of the city, the increase of travel, and the opening up of new streets and alleys that this department has not been able to keep pace with the improvements or meet the demands of citizens, as the sum of \$100,000, the amount appropriated, is inadequate to perform the work required and demanded. There is in the cities of Washington and Georgetown, including suburban streets, about 127 miles of streets and avenues, with an area of over 3,100,000 square yards, over 40 miles of unpaved (but graded and otherwise improved) streets, with an area of about 2,200,000 square yards, and in addition thereto there is of improved and unimproved alleys an area of 800,000 square yards, making a combined area of about 6,100,000 square yards to be kept clean during the year.

Notwithstanding the large area on the one hand and the small appropriation for street and alley service on the other, the thoroughfares of the two cities have been kept in good condition; so much so that Washington is regarded generally as the cleanest city in the country. While said results have been obtained with but small outlay when compared with the cost of like service in other cities and is most gratifying, there is still room for greater improvements; but to attain this much-desired end larger means must be placed at the disposal of the honorable Commissioners. I therefore respectfully urge upon you the necessity of securing, if possible, an appropriation that will be equal to the actual wants and necessities of this branch of the public service, in order that the streets of the capital city may be, by their cleanliness, one of the chief features of this most attractive city and a source of pride not only to its own citizens, but to those of the country at large.

Estimate for 1892-'93.

For sprinkling, sweeping, and cleaning streets and avenues	\$100,000
For sprinkling, sweeping, and cleaning improved alleys	8,500
For labor on unimproved streets and alleys, cleaning gutters, sidewalks and attending to complaints	25,000
For pay roll of superintendent, clerk, and assistant superintendent and inspectors	10,000
For contingent expenses, stationery, printing, purchase of tools, horse-keeping, etc	1,500
Total	145,000

The foregoing estimates are based upon what I believe to be actually needed to thoroughly do the work expected of this department and fully warranted by the expansion of the city, the increased building and traffic, as well as extension of streets, avenues, and alleys.

The following statement will show the amount of work proposed, and which could be done under the above estimate during the year:

	Square yards.
Daily streets, 368,461 square yards per day, aggregates for the year (Sundays excepted)	115,328,293
Semiweekly streets, 1,425,076 square yards, aggregates per year	74,163,952
Once a week streets, 2,019,000 square yards, aggregates per year	104,988,000
Total	294,480,245
Improved alleys, 550,000 square yards per week, aggregates per year ..	28,600,000
Grand total	323,080,245

Cost of above.

294,480,245 square yards, at 35 cents per 1,000 yards	\$103,068.09
28,600,000 square yards, at 29 cents per 1,000 yards	8,494.00
For all classes of employes, horses and carts, etc	35,000.00
For contingent expenses, as stated	1,500.00
Total	148,062.09

The probable deductions necessary to be made on account of inclement weather during the year, when no work can be done, will bring the cost of work within the estimates as made above.

There is, however, one other matter connected with the street and alley service that has been considered, but which is not included in the estimates as made for the next fiscal year. I refer to the proposed work of gathering the horse droppings and other refuse matter at once on certain streets and avenues where deemed best, a class of work that has been introduced in several cities of this country and received most favorably by the public.

While no trial was given this system during the period covered by the fiscal year of 1891, I think I may be permitted to state herein the result of trial of method referred to during present month (July, 1891). The street chosen was Pennsylvania avenue from Seventh street to Fifteenth street, with ten men, three carts, foreman, and assistant foreman. This section was worked from July 3 to 9, instant, when, owing to the tearing up of the car tracks, the work was transferred to section between First and Ninth streets and carried on between these points until the 21st instant, when it was stopped by reason of the street being more or less obstructed from First to Fifteenth streets. The results were most apparent; the street was clean at all times and presented a most attractive appearance. The business men on the avenue and the public generally were more than pleased and regret its being discontin-

STATEMENT OF ACCOUNT.

Amount appropriated for fiscal year 1891-'92	\$100,000. 00
Expended as per foregoing statements.....	99,334. 92
Balance on hand and unexpended	665. 08

Since the close of the last fiscal year the number of streets and avenues swept daily, triweekly, and semiweekly have been increased to the full extent the appropriation would warrant, having at the same time due consideration for work required in other branches of the service. The increased area swept is shown by the following figures: In 1890, total area streets and avenues swept was 162,703,191 square yards; in 1891 there was swept, as stated, 187,529,158 square yards, being an increase of 24,825,947 square yards. The service on the improved alleys has not been increased, but a larger area has been cleaned by reason of the paving of old and opening up of new alleys, the area swept during present fiscal year being 17,222,308 square yards, as against 16,080,583 square yards in the preceding year, being an increase of 1,146,725 square yards.

The work on the unimproved streets and alleys has increased, owing to the increased building throughout the city and the consequent demand for the opening up of new streets and alleys. The growth of this class of work is also brought about by the opening up or extension of suburban streets. As I have already stated, it is almost impossible to give the amount and nature of this work in detail, for the reasons stated; I can not, therefore, show the actual increase of work performed during present fiscal year over that of 1890.

While the service has been increased in many localities and larger areas are now being swept than ever before, such has been the growth of the city, the increase of travel, and the opening up of new streets and alleys that this department has not been able to keep pace with the improvements or meet the demands of citizens, as the sum of \$100,000, the amount appropriated, is inadequate to perform the work required and demanded. There is in the cities of Washington and Georgetown, including suburban streets, about 127 miles of streets and avenues, with an area of over 3,100,000 square yards, over 40 miles of unpaved (but graded and otherwise improved) streets, with an area of about 2,200,000 square yards, and in addition thereto there is of improved and unimproved alleys an area of 800,000 square yards, making a combined area of about 6,100,000 square yards to be kept clean during the year.

Notwithstanding the large area on the one hand and the small appropriation for street and alley service on the other, the thoroughfares of the two cities have been kept in good condition; so much so that Washington is regarded generally as the cleanest city in the country. While said results have been obtained with but small outlay when compared with the cost of like service in other cities and is most gratifying, there is still room for greater improvements; but to attain this much-desired end larger means must be placed at the disposal of the honorable Commissioners. I therefore respectfully urge upon you the necessity of securing, if possible, an appropriation that will be equal to the actual wants and necessities of this branch of the public service, in order that the streets of the capital city may be, by their cleanliness, one of the chief features of this most attractive city and a source of pride not only to its own citizens, but to those of the country at large.

Estimate for 1892-'93.

For sprinkling, sweeping, and cleaning streets and avenues	\$100,000
For sprinkling, sweeping, and cleaning improved alleys	8,500
For labor on unimproved streets and alleys, cleaning gutters, sidewalks and attending to complaints.....	25,000
For pay roll of superintendent, clerk, and assistant superintendent and inspectors	10,000
For contingent expenses, stationery, printing, purchase of tools, horse-keeping, etc	1,500
Total	145,000

The foregoing estimates are based upon what I believe to be actually needed to thoroughly do the work expected of this department and fully warranted by the expansion of the city, the increased building and traffic, as well as extension of streets, avenues, and alleys.

The following statement will show the amount of work proposed, and which could be done under the above estimate during the year:

Daily streets, 368,461 square yards per day, aggregates for the year (Sundays excepted)	Square yards. 115,328,293
Semiweekly streets, 1,425,076 square yards, aggregates per year.....	74,163,952
Once a week streets, 2,019,000 square yards, aggregates per year	104,988,000
Total	294,480,245
Improved alleys, 550,000 square yards per week, aggregates per year ..	28,600,000
Grand total.....	323,080,245

Cost of above.

294,480,245 square yards, at 35 cents per 1,000 yards	\$103,068.09
28,600,000 square yards, at 29 cents per 1,000 yards.....	8,494.00
For all classes of employes, horses and carts, etc.....	35,000.00
For contingent expenses, as stated	1,500.00
Total	148,062.09

The probable deductions necessary to be made on account of inclement weather during the year, when no work can be done, will bring the cost of work within the estimates as made above.

There is, however, one other matter connected with the street and alley service that has been considered, but which is not included in the estimates as made for the next fiscal year. I refer to the proposed work of gathering the horse droppings and other refuse matter at once on certain streets and avenues where deemed best, a class of work that has been introduced in several cities of this country and received most favorably by the public.

While no trial was given this system during the period covered by the fiscal year of 1891, I think I may be permitted to state herein the result of trial of method referred to during present month (July, 1891). The street chosen was Pennsylvania avenue from Seventh street to Fifteenth street, with ten men, three carts, foreman, and assistant foreman. This section was worked from July 3 to 9, instant, when, owing to the tearing up of the car tracks, the work was transferred to section between First and Ninth streets and carried on between these points until the 21st instant, when it was stopped by reason of the street being more or less obstructed from First to Fifteenth streets. The results were most apparent; the street was clean at all times and presented a most attractive appearance. The business men on the avenue and the public generally were more than pleased and regret its being discontin-

ued. It was hardly necessary to sweep the street at night, as usual, so little débris had accumulated after the work had stopped for the day.

The average amount of material gathered from the street per day, for fifteen days the trial lasted, was 14 cubic yards, being a total of 105 cubic yards. The cost per day was \$36.50. I am so well satisfied with the experiment that as soon as the avenue is cleared from First to Seventeenth streets, I respectfully recommend that the men be again placed at work thereon. With the knowledge acquired as to what can be done, I can safely say that a force of sixteenmen and four carts, with a foreman and assistant foreman, can clean this avenue from First street to Seventeenth street better and cleaner than if daily swept by machine, and that it will at all times present a better appearance. The area between the points named is 101,975 square yards, which, to sweep by machine, costs \$35.70; to clean by hand, \$37.50; the difference against the hand labor being but \$1.80. In view of this fact I recommend that the daily sweeping by machine be discontinued and that the street between the points stated be only swept by machine once a week—Saturday nights. The extra cost involved will be per month about \$189.50, which, in view of results, will be more than balanced by having the street always clean and free from dust. I am of the opinion that this system can be extended to other thoroughfares with like good results and at comparatively small advance on present cost of sweeping by machine. I am inclined to think, however, that it should be confined to such streets as are most traveled and upon which the principal business of the city is transacted. If the system is extended to any great amount I believe it would be to the interest of the District that it should own its own horses and carts; that stables and sheds for the carts be built, and with proper facilities for washing and cleaning the carts; that the carts should be water-tight and neatly painted. I again renew my recommendation that the law against the sweeping or throwing of any refuse or sweepings of any character into the streets be strictly enforced; also, in regard to the public alleys, that every effort be made to prevent them being made the dumping ground for the vicinity. It must be admitted that there is little use in expending large sums of money on the streets and alleys of the city to keep them clean if citizens are allowed to make them the receptacle for all manner of refuse.

Very respectfully,

R. A. ARNOLD,
Superintendent of Street and Alley Cleaning.

THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

U.

ORDERS MADE BY THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA DURING THE FISCAL YEAR ENDED JUNE 30, 1891.

OFFICE OF THE COMMISSIONERS
OF THE DISTRICT OF COLUMBIA,
Washington, July 7, 1890.

Ordered, That hereafter no licenses or permits will be issued for merry-go-rounds or shooting galleries, except upon recommendation of the major of police.

JULY 11, 1890.

Ordered, That no permits will be issued for the occupation of any portion of the public spaces, avenues, or streets for stands for any private purposes.

JULY 15, 1890.

Ordered, That the officers and employés of the District government who are members of the National Guard of the District of Columbia shall have leave of absence from their appropriate duties, without loss of time or pay, during the annual encampment from the 21st to the 28th instant, inclusive.

JULY 17, 1890.

Ordered, That William Donaldson, inspector, is hereby directed to proceed to the brick works of John H. Mack, situated near New Cumberland, W. Va., to inspect the brick now being manufactured for use in the District. As soon as this work is completed he will return to his proper station in Washington, D. C. This travel is necessary for the public service.

Ordered, That the proposition made in behalf of Messrs. J. Harrison Johnson, E. Kurtz Johnson, and Charles B. Church to submit to arbitrators for final decision the three suits at law and one in equity now pending between the District of Columbia and said parties, or some of them, in the supreme court of the District of Columbia, and all differences and questions relating to the subject-matter of said suits, is hereby accepted, and the attorney for the District is hereby authorized and directed to enter on behalf of the District into an agreement or arbitration with said parties, and to represent or cause to be represented the District in the hearing before the arbitrators.

Ordered, That each inspector or other officer of the government of the District of Columbia authorized to enter houses in connection with his official duty shall, while on such duty, wear a uniform cap with a badge of his office conspicuously displayed thereon.

Ordered, That the building regulations of the District of Columbia are hereby amended as follows:

Section 1: The words "first floor" in the definition of bay windows are stricken out.

Section 7, part 1: Projecting steps are hereby limited on unparked streets to 7 feet by striking out the word "nine," in line 6, and inserting "seven" in lieu thereof.

Section 7: The following is substituted for the second paragraphs limiting the projections from the building line on streets less than 80 feet in width, viz:

On streets less than 80 feet in width the projections shall not exceed 4 feet; but no projection or other work except steps exterior to the building line may be constructed on streets less than 70 feet in width, except by special permit and under such restrictions as the Commissioners may impose. No fireplace or chimney shall be constructed in any projection outside of the building line unless the shaft return to the building line and be carried upon iron beams.

Section 7: The following is substituted for the third paragraph, limiting the size of bay windows and tower projections, viz:

Bay windows and tower projections shall not exceed 14 feet in width unless approved by the Commissioners, but with such approval such window and tower projections may be constructed, aggregating not more than 50 per centum of the frontage of a principal or entrance front, and 40 per centum of a side front, exclusive of tower projection. On buildings 20 feet and less in width the building line front must be preserved by not less than 3 feet 6 inches; on buildings 15 feet and less in width by not less than 2 feet 6 inches; on buildings over 20 and under 35 feet front by not less than 4 feet 10 inches, spaced as approved by the inspector of buildings. But one projection will be allowed on a building 35 feet and less in width.

Section 12: The following is added after the words "dwelling house," in line 6, viz:

Except in base of stables located in alleys and 30 feet or more from the building line of any avenue or street intercepting such alley.

JULY 21, 1890.

Ordered, That the special assessment clerk will enter upon his records that the tax against lots 1 to 12, square 156, for setting curbstone and paving footway on P street by the late corporation of Washington has been declared invalid by the Supreme Court of the United States.

Ordered, That the lot occupied by the Fourth Presbyterian Church of Washington, D. C., running southward 128 feet on Ninth street, from Grant Place, by a depth of 100 feet, is exempted from special assessment and will be so noted on the records of the special assessment division.

JULY 22, 1890.

Ordered, That the name of Tenallytown road is hereby changed to Wisconsin Avenue, and no future subdivision of land bordering said avenue shall be approved unless each such subdivision shall provide pro rata for the widening of said avenue to 120 feet.

JULY 24, 1890.

Ordered, That the proposal of the Wheeler Reflector and Light Company to furnish lamps and illuminating material and light, extinguish, maintain, and repair street oil lamps in the District of Columbia during the current fiscal year is hereby accepted, with the understanding that the two-way reflectors shall be used in all except special cases and all lamps be similar and equal to the one presented for test.

Ordered, That all the taxes and assessments levied on sub lots 35 to 60, square 240, in the name of the vestry of St. Andrews Protestant Episcopal Church, are remitted for the year 1886 and subsequent years, and said property will be hereafter exempt from all taxes and assessments so long as used for church purposes.

JULY 26, 1890.

Ordered, That permission is hereby given the Baltimore and Ohio Railroad Company to lay and construct certain tracks and to erect certain structures as per plan submitted (L. R. 167692 C. O.), upon its property in the subdivision known as Trinidad, said tracks to be constructed across the beds of P, Q, and R streets NW.; also to make such cuttings in the beds of said streets, and so depress the beds of said streets below the established grade, as to admit of the construction of said tracks upon a grade uniform with that of the main tracks of the Baltimore and Ohio Railroad adjoining said subdivision; the said Railroad Company agreeing to construct and maintain a suitable fence at the top of said cuttings.

Ordered, That an accurate measurement of the streets which have been swept during the past year in the city of Washington be made at the earliest practicable day, and maps on a scale of 1 inch to 100 feet be made thereof, and that a competent engineer with two assistants be detailed from the engineer department to proceed at once with that work. He will make weekly reports to the Board of Commissioners of his measurements during the preceding week.

JULY 28, 1890.

Ordered, That the stock of the corporation of Washington, held by third parties, the security for which was destroyed by the action of the District authorities in accepting drawbacks from the owners of the property upon which said certificates were a lien, in payment of the special assessments represented by such certificates, will be redeemed, with interest thereon, by issue of drawbacks, under the act of June 2, 1890, less the amount of cash received in payments made to the collector, for which the auditor will issue warrant as heretofore.

Ordered, That the fountain at the junction of Seventh street and Pennsylvania avenue be put in working order, at estimated cost of \$140.30, payable from appropriation for pumping expenses and pipe distribution, and that an employé of the Water Department daily visit the fountain and see that it is kept in order.

JULY 30, 1890.

Ordered, That the following changes are hereby made in the names of streets in Le Droit Park, viz: Le Droit avenue to Second street, Harewood avenue to Third street, Linden street to Fourth street, Larch street to Fifth street, Juniper street to Sixth street, Maple avenue to T street.

AUGUST 1, 1890.

Ordered, That Capt. W. T. Rossell and Maj. W. G. Moore proceed at once to examine the several crossings of the cable road on Seventh street in this city, and report at what points flagmen or other safeguards to be afforded by the company are needed for the proper protection of persons and vehicles.

Ordered, That permission is hereby granted the United States Electric Lighting Company to extend its wires into the following-named alleys, viz:

From the conduit on Sixth street NW. easterly into the alley in square B; from the conduit on B street NW. northerly into the alley in square 461; from the conduit on Fourteenth street NW. westerly into the alley in square 215; from the conduit on D street NW. northerly into the alley in square 431 and southerly into the alley in square 432; from the conduit on Seventeenth street NW. easterly into the alley in square 167.

Permission is also given to erect the necessary distributing poles in the said alleys; but no poles shall be erected in any street or avenue, and each pole shall be so placed as not to interfere with the free use of the alley in which it is placed or with the entrance to or exit from private property.

All work shall be done at the sole risk and expense of the United States Electric Lighting Company, which, in accepting this permit, agrees to bear all expenses of replacing the streets and alleys in good condition in every respect.

AUGUST 2, 1890.

Ordered, That lots 17 and 18, block 4, Washington Brick Machine Company's subdivision of Trinidad, are exempt from taxation for the current fiscal year, and for so long thereafter as they may be used for charitable purposes, as at present.

AUGUST 4, 1890.

Ordered, That the estimate of the inspector of buildings for repairs to police stations, amounting to \$1,289, is hereby approved.

AUGUST 8, 1890.

Ordered, That the north part of lot 10, square 686, having been sold for unpaid taxes December 10, 1874, all unpaid special assessments then of record will be canceled by the special assessment clerk upon the records of his office, and the outstanding lien certificates therefor will be redeemed on surrender thereof.

Ordered, That the bridges across the Chesapeake and Ohio Canal at Thirty-third and Thirty-fourth streets be closed to travel.

Ordered, That permit be granted the Rock Creek Railroad Company to lower the grade of the Pierce Mills road at its intersection with Connecticut avenue extended.

AUGUST 9, 1890.

Ordered, That permission be given the United States Electric Lighting Company to make service connections for the Executive Mansion on Pennsylvania avenue, and to make service connections with house 1114 Vermont avenue, with its underground conduit in alley immediately opposite said house, provided that any wires laid in the street be placed underground as required by law.

AUGUST 11, 1890.

Whereas the supreme court of this District having decided in the case of *Fendall vs. The District of Columbia* (No. 4466 Equity) and *Alexander vs. District of Columbia* (No. 5750 Equity) that the assessments for paving the carriageway on Louisiana avenue and D street, levied by the late Corporation of Washington on or about February 15, 1871, are illegal and void, it is therefore

Ordered, This 11th day of August, 1890, at the request of the trustees of the Corcoran Gallery of Art, that said assessment as against lots 14 and 15, in square 490, be, and the same is hereby, canceled of record and held for naught.

AUGUST 12, 1890.

Permission is hereby granted the Chesapeake and Potomac Telephone Company to place its wires underground and overhead and to erect the poles, all as asked for in its application, bearing date July 25, 1890, and as per its map attached thereto and forming part of said application, it being the express understanding and agreement that this permit is not in any way to relieve the company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the recommendation of the board of three persons authorized by the appropriation act of August 6, 1890, for the District of Columbia to consider the location, arrangement, and operation of electric wires in said District.

The routes of all wires, both overhead and underground, the location of all poles, and all work done in connection with the same, shall be

done in accordance with the requirements of the engineer department of the District of Columbia.

The work to be done at said company's risk and expense, under the direction and subject to the requirements of this office, to be commenced within — days from this date and completed within — days thereafter.

Ordered, That the following requisitions for the quarter ending September 30, 1890, are hereby approved:

Replacing obstructed sewers	\$5,000
Cleaning and repairing sewers and basins	10,000
Main and pipe sewers	7,000
Construction of suburban sewers	3,500
Permit work	7,000

AUGUST 13, 1890.

Ordered, That permission is hereby given to the trustees of the Mount Pleasant Cemetery to disinter and transfer to the reserved portion of their cemetery the remains now buried in the portion of the cemetery taken for part of the Zoölogical Park. The removals to be made subject to the supervision and instructions of the health officer, District of Columbia.

Ordered, That permission is hereby given R. F. Bradbury to use the shore on the east end of the bridge over the Eastern Branch at Pennsylvania avenue in Ellicott Circle, for the purpose of carrying on the boat business. This permission is subject to revocation at the pleasure of the Commissioners.

AUGUST 14, 1890.

Permission is hereby given the United States Electric Lighting Company to lay underground conduit under sidewalk on west side of Seventeenth street, from H to K street, and on west side of Connecticut avenue, from K street to Florida avenue NW., and to take down overhead wires on Seventeenth street from Pennsylvania avenue to Florida avenue NW.

Also to place distributing poles in alleys along said route and connect same with the underground conduit.

It being the express understanding and agreement that this permit is not in any way to relieve the company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the board of three persons authorized by the appropriation act of August 6, 1890, for the District of Columbia to consider the location, arrangement, and operation of electric wires in said District, the work to be done at their own risk and expense under the direction and subject to the requirements of this office, to be commenced within — days from this date and completed within — days thereafter.

AUGUST 16, 1890.

Ordered, That the special assessment clerk shall redeem, under the act approved June 2, 1890, outstanding lien certificates in cases where the amounts were paid into court and by the court turned over to James A. Magruder, late treasurer of the board of public works, District of Columbia.

AUGUST 18, 1890.

Ordered, That the auditor issue a warrant for \$6,750, payable to the order of William E. Hodge for lots 108, 109, 110, 111, and part of lot 107, in James E. Miller's recorded subdivision of certain lots in square 276, chargeable to appropriations made August 6, 1890, for purchase of grounds contiguous to school building on Twelfth street, near B, in square 276, for playground for said building.

AUGUST, 20, 1890.

Ordered, That the major and superintendent of police, at his request, is relieved of the charge of the work of sweeping and cleaning streets, avenues, and alleys, to take effect the 1st proximo, and that on and after said date the said work shall be under the charge of the president of the Board of Commissioners.

Ordered, That the following apportionment of part of the appropriation of August 6, 1890, for the temporary support of indigent persons, male and female, is hereby made, viz:

To the board of management of the temporary home for soldiers and sailors, Grand Army of the Republic, District of Columbia.....	\$2,500
Young Women's Christian Home.....	1,000
Hope and Help Mission	1,000
Washington Night Lodging House Association.....	400

AUGUST 21, 1890.

Ordered, That, pursuant to the judgment of the supreme court of the District of Columbia, dated June 14, 1890, the special assessment dated April 12, 1875, for \$414.33, upon lot 6, square 1005, in the name of Jacob Miller, levied for a carriageway improvement on Maryland avenue from First street east to Fifteenth street east, the Commissioners' revision of said assessment, adding thereto the items of grading, curbing, brick sidewalk, and trees, allowing drawbacks and increasing the total amount to \$434.10, a special assessment, dated November 3, 1876, of \$140.27, upon said lot 6 in the name of Jacob Miller, for a sidewalk on said avenue, from Eighth street east to Fifteenth street east; a revision of the assessment reducing the total amount to \$86.71; all other special assessments and revised assessments against said lot for the improvements aforesaid, be the amount of said assessment, more or less; a lien certificate of indebtedness No. 7182, dated June 20, 1875, for \$414.33, with interest from April 26, 1875, against said lot 6, and a lien certificate of indebtedness No. 10186, dated August 4, 1880, for \$83.71 against said lot 6 be quashed and held to be null and void, said accounts are hereby canceled, as prescribed, and the special assessment clerk will so note upon the records of his office.

AUGUST 23, 1890.

Ordered, That George H. Noyes, electrician, is appointed to the office of telegraph operator, and that Alvin S. Richards is hereby appointed electrician, vice Noyes, to take effect the 20th instant.

Ordered, That those employes of the District who belong to any organization which proposes to take part in the celebration of the opening of the new bridge across the Eastern Branch of the Potomac River, and who, in the opinion of the heads of the different departments, can be spared from their duties, are hereby given leave of absence from 12 o'clock m. on the 25th instant until the close of that day.

Ordered, That in view of the inability of the Georgetown Gaslight Company to furnish suitable light for the public streets of Georgetown, oil lamps be put up as soon as possible for the purpose of lighting the streets of Georgetown.

AUGUST 25, 1890.

Ordered, That, under the provisions of the law of the late corporation of Washington of November 4, 1842, section 3, page 2, Webb's Digest, Wm. H. Pritchett, Thomas B. Kalbfuss, and Benj. N. Meeds are hereby appointed a special commission to levy a tax with which to satisfy the damages that have accrued from the opening of alley in square 306, and to make return of such under oath to the Commissioners of the District of Columbia.

Ordered, That the following apportionment of the appropriation of \$165,000 for permit work is hereby made, viz:

Sewers	\$35,000
Sidewalks	65,000
Alleys	65,000

AUGUST 27, 1890.

Ordered, That an expenditure of \$2,590 from the appropriation for main and pipe sewers is authorized to construct sewers to relieve drainage system east of Fourteenth street, between Rhode Island avenue and P street; P street, between Fourteenth street and Kingman Place; and Kingman Place, between P and Q streets, as per plan submitted.

AUGUST 30, 1890.

Ordered, That the proposal of Wm. E. Hodge to sprinkle, sweep, and clean the paved alleyways in the city of Washington and Georgetown, D. C., at 29 cents per 1,000 square yards, and sprinkle, sweep, and clean the unpaved alleyways in said cities at 27 cents per 1,000 square yards, is hereby accepted on condition that the bidder enter into a contract to

do said work for two years on same terms, except his price, as his former contract, with the reserved right of the Commissioners, at their will, to abrogate at any time said contract for the second year on thirty days' notice.

Ordered, That the apportionment of \$65,000 for sidewalks from the appropriation for permit work be divided as follows:

Regular permit	\$10,000
Georgetown.....	5,000
Northwest section.....	12,500
Northeast section	12,500
Southeast section	12,500
Southwest section.....	12,500

Ordered, That sidewalks in the northwest section be improved in the following order:

Pennsylvania avenue, from First street to Rock Creek; Seventh street, from Pennsylvania avenue to Florida avenue; F street, from Fifth to Fifteenth streets; G street, from New Jersey avenue to Fifteenth street; Fourteenth street, from Pennsylvania avenue to Florida avenue; Fifteenth street, from Pennsylvania avenue to Florida avenue; Ninth street, from Pennsylvania avenue to New York avenue; D street, from Louisiana avenue to Pennsylvania avenue.

That in the other sections of Washington the work be commenced at North Capitol street, and that the north and south streets be first improved, and that upon the completion of these the streets running east and west be improved.

That in Georgetown the following order be followed: M street, from Rock Creek to new free bridge; Thirty-second street, from M to Road street; P street, from Rock-Creek Bridge to Thirty-fourth street. Subsequently the streets running east and west, beginning from M street and going north.

That, as far as possible, sidewalks in each square be made of such material as will conform with the majority of the material already in use.

SEPTEMBER 1, 1890.

Ordered, That permit be granted the Chesapeake and Ohio Telephone Company to set guy poles near southeast corner Eighth and K streets SW.; at southwest corner Thirty-second and Water streets; east side of Thirty-second street, 125 feet north of Water street.

SEPTEMBER 2, 1890.

Ordered, That permit be granted the United States Electric Lighting Company to replace broken lamp post corner of Seventh and Q streets NW. and to place 7 poles on the east side of Seventh street, between Florida avenue and the Freedmen's Hospital, the poles to be erected at the curb line.

SEPTEMBER 3, 1890.

Ordered, That permit be granted to make opening in the Fifteenth-street sewer for the purpose of making connection with an 8-inch sewer pipe from the rag laundry of the Bureau of Engraving and Printing.

Ordered, That in connection with the establishment of the police-alarm system in Georgetown permit is granted Royce and Marean to erect poles as follows: one near the east end of alley, square 22; 1 east side of Twenty-ninth street, between Canal and M streets; 1 near northwest corner Twenty-seventh and Dunbarton streets; 4 on Road street, between Thirty-first and Thirty-second streets; 6 on Thirty-fourth street, between Q and W streets; 1 on Q street, between Thirty-fourth and Thirty-fifth streets; 1 (to be reset) northwest corner Thirty-fifth and N streets.

SEPTEMBER 4, 1890.

Ordered, That a credit of \$227.45 be allowed on the west-street front assessment of lot 14, square 86, Georgetown, on account of triangular shape.

SEPTEMBER 8, 1890.

Ordered, That the special assessment clerk return to the Commissioners the papers in his office relating to the condemnation of alley in square 897, in order that they may be referred to the attorney to facilitate his consideration of a question raised as to the validity of the proceedings taken in the premises.

Ordered, That the entry on the personal tax ledgers for the fiscal year ending June 30, 1889, against the following building associations be canceled, viz: Equitable Coöperative, 1003 F; Second Columbia, Ninth and D; Serial Savings and Building Association, 517 Tenth; First Co-operative, etc., of Georgetown.

SEPTEMBER 9, 1890.

Ordered, That a board consisting of the inspector of buildings, the general inspector of streets, and the secretary of the Board of Commissioners, is hereby created to prepare and submit to the Commissioners a system of naming the alleys in the District of Columbia, in which all alleys sufficiently wide to permit of the construction of dwellings under the building regulations shall be generically called courts.

Ordered, That no further subdivisions of land fronting on Lincoln avenue will be approved by the Commissioners unless the parties making such subdivisions shall provide pro rata for widening said avenue to 90 feet.

SEPTEMBER 10, 1890.

Ordered, Permission is hereby given the board of management, temperance tent represented by John R. Mahoney, chairman, to occupy with their tent a small portion of the property of the District at south-east corner Seventh and C streets southeast. This permission is given subject to revocation at the pleasure of the Commissioners.

SEPTEMBER 12, 1890.

Whereas in the condemnation of the Green tract on Connecticut avenue extended;

Whereas the Rock Creek Railway Company has notified the Commissioners that the verdict of the above-entitled case is not satisfactory: Therefore, it is

Ordered, That a hearing of the parties interested will be had before the Commissioners at their board room on Monday the 15th instant, at 11 o'clock a. m., as to impaneling another jury in said case, if no arrangement can be made between the said parties before that date.

Notice of this order will be sent to Henry E. Davis, attorney for said company and to the persons named in verdict of the jury as interested in said tract.

Ordered, That permission is hereby given to the trustees of Tunlaw Heights to lay a 4-inch water main on Thirty-eighth street between the north side of Galveston street and the south side of Franklin street, and 2-inch water pipe on the north side of Galveston street between Wisconsin avenue and Thirty-eighth street west, and on the west side of Wisconsin avenue between Galveston street and lot 1, square 1; also a 2-inch pipe on the south side of Frankfort street, between Wisconsin avenue and Thirty-eighth street west, and on both sides of Frankfort street between Thirty-eighth and Thirty-ninth streets west: *Provided*, That all work be done and repairs made at the sole expense of the applicants and subject to the inspection of the water department. This permit is granted and accepted upon the express condition that all the pipes and fixtures laid and constructed in and upon the public streets and roads by said trustees in carrying out the purpose of their petition shall belong to the said District, but if the same or any part thereof shall at any time be removed by said District or by its order, the said District of Columbia shall relay the portion so removed: *Provided, nevertheless*, That when a water supply-system shall be established by public authority for said locality this permit shall be revocable without compensation at the will of the said District, and there shall be no exemption of any property from the usual water-main tax by reason of this permit.

Accepted September 15, 1890.

A. T. BRITTON.
C. J. BELL.

SEPTEMBER 13, 1890.

Ordered, That all employes of the District government who are members of the Veteran Volunteer Firemen's Association may be absent from duty on the 18th instant to attend the parade to be held in Chester, Pa.

SEPTEMBER 15, 1890.

Ordered, That the following orders to regulate the construction, repair, and operation of elevators in the District of Columbia are hereby made and published:

1. One of the assistant inspectors of buildings shall hereafter be designated and known as inspector of elevators, and it shall be the duty of said inspector to examine from time to time any and all elevators, and make reports in writing on such examinations to the inspector of buildings as hereinafter provided for.
2. Manufacturers of elevators erected in said District shall, upon the request of the inspector of buildings, furnish to said inspector a list of all elevators manufactured by them and placed in any building in said District, giving location, carrying capacity, date of construction, and time when the same were put in use, and the names of owners as far as known, and a record shall be kept in the office of the inspector of buildings.
3. Upon any elevator being hereafter placed in any building in the said District the owner or his agent shall immediately so notify the inspector of buildings in writing, and such elevator shall not be used until it shall have been duly inspected. A like notice of any repairs or alterations intended to be made to any elevator shall be given by the person employed to make such repairs or alterations.
4. It shall be the duty of any and all persons in charge of the running of elevators to carefully examine the same and appliances once in every twenty-four hours, and upon the discovery of any defects or impairments tending to endanger life said person or persons shall immediately desist from using the elevator, and at once notify the inspector of buildings of any and all defects therein. The inspector of buildings shall, upon receiving said notice, cause an inspection to be made of said elevator without delay, and determine upon what is requisite and necessary to repair and make safe the same; and upon said elevator being repaired and made safe the inspector of buildings shall issue a certificate to the person in charge that said elevator has been put in safe order and is fit for use.
5. The owner, lessee, manager, or other person having charge or control of any elevator now in operation in the said District and the manufacturer of any such elevator hereafter to be placed in any building shall cause to be fastened, in a conspicuous place in said elevator, a metal plate, having suitable raised letters on same, which shall prescribe the number of pounds weight which said elevator shall, after proper test, have capacity to carry; but no more than 80 per cent thereof shall be permitted to be carried thereon.
6. Each elevator in the said District used for the conveyance of passengers shall be inspected at least once in every three months and a report made thereof to the inspector of buildings on the day following such inspection. The inspector will state in said report the condition of the running gear, ropes, safety attachments, pulleys, and all other parts of the machinery applied to the use of said elevator, and should any repairs be found necessary to be made the inspector of buildings shall cause immediate notice thereof to be served, as hereinafter provided.
7. Should any defect be found to exist in any part or parts of any elevator which would tend to impair the safety or endanger life by the continued use of such elevator, the inspector of elevators shall inform the person of the danger of continuing the use thereof, and the inspector of buildings shall immediately cause a notice in writing to be served upon

the owner or owners, lessee, manager, or any other person or persons having use, control, or management of said elevator, which notice may contain a statement of the repairs necessary to be made; and said elevator shall not again be used until a certificate in writing shall be issued by the inspector of buildings that it has been put in safe running order and is fit for use. The notice herein provided for may be served upon any person having charge of the running of said elevators.

8. The following qualifications necessary for persons who now are or shall hereafter be placed in charge of running any elevator in this city are hereby prescribed, and no person shall be employed for such purposes or engaged therein unless he possesses such qualifications:

(1) He shall have a knowledge of the different parts of the machinery attached to or necessary in running such elevators and understand the application thereof.

(2) He shall at least have one month's experience in running an elevator under the instruction of a competent person.

(3) He shall be reliable and of sober and industrious habits.

(4) He shall not be less than 18 years of age.

(5) Whenever the inspector of buildings shall become satisfied that the person engaged in running any elevator is incompetent or disqualified from any cause to continue to run the same, the said inspector of buildings shall forthwith notify the owner or the person managing or controlling the same, and the person so notified shall thereafter become responsible for the acts of said employés.

SEPTEMBER 16, 1890.

Whereas on the 15th of August, 1890, the Commissioners directed the United States marshal for the District of Columbia to summon a jury of seven judicious, disinterested men, not related to any party interested, to be and appear on the land within the path of the proposed extension of Connecticut avenue, known as the Green and Shoemaker tracts, to assess the damages, if any, which each owner of said land might sustain by reason of the passing through the same of the said extension; and

Whereas the marshal for the District of Columbia did summon such jury and transmit the verdict of the same to the Commissioners of said District; and

Whereas the Rock Creek Railway Company notified the said Commissioners that said verdict, so far as it referred to the Green tract, was not satisfactory; and

Whereas on the 12th instant the Commissioners notified the parties in interest that they would hear them in their board room on the 15th instant, at 11 o'clock a. m., in respect to said verdict and to ascertain whether an arrangement could be made between said parties; and

Whereas no arrangement was made between said parties, and the Commissioners being dissatisfied with the verdict as to the said Green tract, it is

Ordered, That the marshal for the District of Columbia is hereby ordered to summon a second jury of twelve judicious, disinterested men, not related to any one in interest, to meet and view said premises, giving the parties interested due notice and proceeding otherwise as prescribed in sections 257 to 267, inclusive, Revised Statutes of the United States, relating to the District of Columbia.

SEPTEMBER 19, 1890.

Ordered, That fire hydrants be erected at the following places at total estimated cost of \$397.15:

East side of Second street, between E and F streets NW., midway between north and south alleys.

South side New York avenue, between Sixth and Seventh streets NW.

Alley west side Sixth street, between N and M streets NW.

Alley south side of O street, opposite Henry School.

Building between Sixth and Seventh streets NW.

Alley north side E, between Twelfth and Thirteenth streets NW.

Alley south side of O street, between Ninth and Tenth streets NW.

SEPTEMBER 22, 1890.

Ordered, That upon the completion of the entry of an assessment upon the records of his office, the special assessment clerk shall proceed to cause notice of such assessment to be served to each proprietor of property so assessed, if he be a resident of the District of Columbia, and his residence be known to the office, and if he be a nonresident or his residence unknown to the office, such notice to be served upon the tenant or agent, if known to the office, and a return of such service shall be made under oath stating the manner in which such service was made, and be filed among the records of the special assessment division. And the service of such notice shall in all cases be either personal on said proprietor, tenant, or agent, or by leaving the same with some person of suitable age at the residence or place of business of such proprietor, agent or tenant, or by affixing or placing a copy thereof on the property against which the assessment is made.

SEPTEMBER 24, 1890.

Ordered, That in pursuance to the decree in equity No. 10585, that sub lot No 5, square 389, is clear and free from the lien of all taxes assessed prior to June 13, 1876, the special assessment against said lot for improvement made in 1875 will be canceled upon the tax records of the District.

Ordered, That the attorney for the District of Columbia is authorized to confess judgment in the suit of the Barber Asphalt Company vs. The District of Columbia, to recover \$177.92 due said company for paving done under the direction of the District engineer department on the tracks of the Washington and Georgetown Railroad Company on Fifteenth street, opposite the Treasury building.

SEPTEMBER 25, 1890.

Ordered, That the following rules and regulations are hereby established for observance in the use of the bridge over the Eastern Branch at Pennsylvania avenue:

- (1) Horses and vehicles of all kinds must not go faster than a walk, except in cases of urgent necessity.
- (2) No fishing allowed from top of bridge, underneath, nor from any pier, abutments, or slopes of same.

- (3) No loafing or lounging on the bridge, or approaches to same.
- (4) No games of any kind allowed on the bridge, no stone throwing or dropping of stones on passing railroad trains permitted.
- (5) No person allowed to go up or down the slopes or embankments at either side of the bridge.
- (6) Bicycle riders must go at a moderate rate of speed while on the bridge.

All the foregoing are now in successful operation.

SEPTEMBER 26, 1890.

Ordered, That the dealers in bacon at the Eastern Market are allowed to sell fresh pork and sausage from their stands.

SEPTEMBER 27, 1890.

Ordered, That permission is given L. F. Follansbee to sink a 3-inch pipe well at or near the abandoned pump on Louisiana avenue, between Ninth and Tenth streets, to obtain a supply of good drinking water, and that a pump with trap and waste to sewer be erected there at an expense not to exceed \$25, if the District chemist shall find the water suitable for drinking purposes. Said pump to be for public use.

Ordered, That for the fiscal year ending June 30, 1891, and pursuant to the act of Congress providing a permanent form of government for the District of Columbia, approved June 11, 1878, a tax be, and the same is hereby, levied of \$1.50 on every \$100 of real estate within the District of Columbia not exempted by law, except upon real property held and used exclusively for agricultural purposes without the limits of the cities of Washington and Georgetown, and so designated by the assessor in his annual return, the rate on which shall be \$1 on every \$100, and upon all personal property in the District of Columbia not taxable elsewhere \$1.50 on every \$100 according to the assessed valuation thereof. The first half of said tax shall be due and payable the 1st day of November, 1890, and the second half on the 1st day of May, 1891.

SEPTEMBER 30, 1890.

Ordered, That the cost (\$96.37) of trimming the trees in Washington and Georgetown that interfered with the wires belonging to the District be chargeable to the appropriation for the telegraph and telephone service.

OCTOBER 1, 1890.

Deeming it conducive to the public interest to open T street from Lincoln avenue to Second street NE., the Commissioners of the District of Columbia have had the route surveyed and a plat thereof prepared and filed in this office in compliance with the requirements of law. Notice is hereby given of the proposed opening of the highway aforesaid, and

that all persons who have objections to present thereto are called upon to attend at this office at 2 o'clock p. m. on Tuesday, the 28th day of October, 1890, at which time the Commissioners will give hearing to all persons in interest.

OCTOBER 2, 1890.

Ordered, That the permit given to the United States Electric Lighting Company, August 14, 1890, to lay certain underground conduits is hereby extended to embrace, under like conditions, the laying of a conduit in carriageway of I street, from Fourteenth street to McPherson Square, and in north sidewalk of I street from said square to Seventeenth street W.

OCTOBER 4, 1890.

Ordered, The requisite proceedings having been taken by all the owners of square 981, in the city of Washington, in conformity to the act of Congress entitled "An act to authorize the changing of alleyways in the city of Washington," approved June 6, 1882, so much of the old alleyways in said square as the petitioner asks shall be closed is hereby closed as prayed for, and as is indicated for that purpose on the plan hereto attached (L. R. 169400, C. O.), and the new alleyways proposed by the petitioner to be substituted therefor as indicated on said plan are hereby declared open as public alleys.

OCTOBER 9, 1890.

Ordered, That permission is hereby granted the Western Union Telegraph Company to erect a pole in front of 1219 Thirty-second street NW., provided that wires of the District of Columbia police and fire alarm service be allowed to use said pole.

Ordered, That Commissioner John W. Douglass is hereby chosen president of the Board of Commissioners of the District of Columbia, and Commissioner John W. Ross acting president of the Board; the assignment of duties to the special supervision of the several Commissioners to remain as at present until otherwise ordered.

OCTOBER 10, 1890.

Ordered, That the requisite proceedings having been taken by all the owners of square 937, in conformity to the act of Congress entitled "An act to authorize the changing of alleyways in the city of Washington," approved June 6, 1882, so much of the old alleyways in said square as the petitioners ask shall be closed is hereby closed as prayed for, and as is indicated for that purpose on the plat hereto attached (L. R. 169,519, C. O.) and new alleyways proposed by the petitioners to be substituted therefor, as indicated on said plan, is hereby declared open as a public alley.

OCTOBER 11, 1890.

Ordered, That the special assessment clerk is hereby directed to cancel on the records of the Washington City and District taxes and assessments in certiorari cases numbered on the court dockets as follows: 30593, 30609, 30735, 30759, 30808, 30809, 30821, 30811, 30813, 30819, 30485, 30734, 30776.

Whereas on the 15th of August, 1890, the Commissioners directed the United States marshal for the District of Columbia to summon a jury of seven judicious, disinterested men, not related to any party interested, to be and appear on the land within the path of the proposed extension of Connecticut avenue, known as the Green and Shoemaker tracts, to assess the damages, if any, which each owner of said land might sustain by reason of the passing through the same of the said extension; and

Whereas the marshal for the District did summon such jury and transmit the verdict of the same to the Commissioners of said District; and

Whereas the Rock Creek Railway Company notified the said Commissioners that said verdict so far as it referred to the Green tract was not satisfactory; and

Whereas on the 12th ultimo the Commissioners notified the parties interested that they would hear them in their board room on the 15th ultimo at 11 o'clock a. m., in respect to said verdict and to ascertain whether an arrangement could be made between said parties; and

Whereas no arrangement was made between said parties, and the Commissioners, being dissatisfied with the verdict as to the said Green tract, ordered the marshal for the District of Columbia to summon a second jury of twelve judicious, disinterested men, not related to any one in interest, to meet and view said premises, giving the parties interested due notice, and proceeding otherwise as prescribed in sections 257 to 267, inclusive, of the Revised Statutes of the United States relating to the District of Columbia; and

Whereas the said marshal did summon such second jury and return to the Commissioners of the District of Columbia the verdict of the same finding and assessing the damages sustained by the several owners of said tract of land, to wit: to William A. Gordon and Charles C. Duncan, trustees; Osceola C. Green, Eastmond B. Green, and Easie C. Green, as damages for 2.33 acres or 101,494 square feet of ground of said Green tract for the purpose of extending said avenue, the sum of \$3,495; and

Whereas said verdict has been recorded by said Commissioners as final and conclusive, it is

Ordered, That the said extension of Connecticut avenue is hereby declared a public road.

Ordered, That the following verdict is hereby recorded as final and conclusive:

In the matter of the condemnation of land for opening Connecticut avenue extended, in accordance with the act of Congress of May 28, 1890, entitled "An act to change the route of the Rock Creek Railway Company, and for other purposes."

DISTRICT OF COLUMBIA, *October 3, 1890.*

We, the undersigned jurors, summoned by the marshal of the United States in and for the District of Columbia, in conformity to the direction of the Commissioners of the District of Columbia in that behalf, pursuant to the provisions of the act of Congress above named, to ascertain the damages, if any, which each owner of the certain tract of land lying within the path of Connecticut avenue extended, now known as the Green tract, might sustain by reason of the passing through the same of said avenue extended, being first duly sworn according to law by said marshal, and each and every one of us being in nowise interested in this proceeding or in any way related to any of the parties interested therein, met on the said tract, viewed the land to be condemned and taken for the extension of said avenue, and having taken the testimony in relation thereto, and having also taken into consideration the benefit the extension of said avenue may be to each owner by enhancing the value of his or her land or otherwise, hereby find and assess the damages sustained by the several owners of said tract of land aforesaid in the amount set opposite their names for the property belonging to them, and in pursuance of these proceedings taken and condemned or to be taken and condemned for the extension of said avenue aforesaid, to wit:

To William A. Gordon and Charles C. Duncanson, trustees; Osceola C. Green, Eastmond P. Green, and Easie C. Green as damages for 2.33 acres or 101,494 square feet of said Green tract, for the purpose of extending said avenue, the sum of \$3,495.

Witness our hands and seals the day and year first hereinbefore written.

JAS. A. BARBER.	[SEAL.]
M. W. BEVERIDGE.	[SEAL.]
A. P. FARDON.	[SEAL.]
G. T. DUNLAP.	[SEAL.]
JNO. A. HAMILTON.	[SEAL.]
H. O. TOWLES.	[SEAL.]
THEO. SMITH.	[SEAL.]
A. W. KELLY.	[SEAL.]
C. B. PIERCE.	[SEAL.]
M. I. ADLER,	[SEAL.]
THOS. L. CROPLEY.	[SEAL.]
A. F. FOX.	[SEAL.]

Ordered, That permission is hereby granted the United States Electric Lighting Company to lay underground conduits along the following named streets and avenues:

On Massachusetts avenue from Ninth street NW. to Thomas circle in south sidewalk, and from Thomas circle to Florida avenue in north sidewalk. Also on First street NW., from Pennsylvania avenue to B

street SW., under west sidewalk, thence in south sidewalk of B street to South Capitol street, thence in south roadway of B street and Pennsylvania avenue to Fourth street SE., thence in south sidewalk of Pennsylvania avenue to Sixth street SE., thence in south roadway of Pennsylvania avenue to Seventh street, thence in south sidewalk of Pennsylvania avenue to Eighth street east, thence in west sidewalk of Eighth street east to I street south.

It being the express understanding and agreement that this permit is not in any way to relieve the company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the recommendation of the board of three persons, authorized by the appropriation act of August 6, 1890, for the District of Columbia, to consider the location, arrangement, and operation of electric wires in said District; and it being further understood and agreed that any and all overhead electric-lighting wires of the United States Electric Lighting Company along the routes specified shall be removed within sixty days from the time of completion of the conduits.

All work done under this permit shall be in accordance with the requirements of the Engineer Department of the District of Columbia.

The work to be done at your own risk and expense under the direction and subject to the requirements of this office, to be commenced within ten days from this date and completed within forty days thereafter.

OCTOBER 14, 1890.

Ordered, That the special assessment clerk cancel the assessment upon certificates 6038, 6042, 6043, 6044, which were issued in payment of damages for land taken in alley in square 630 and issue drawback certificates for same under the act of June 2, 1890.

OCTOBER 16, 1890.

Ordered, That permission is hereby granted the Anacostia and Potomac River Railroad Company to construct tracks on B street N. as shown on plat herewith:

Ordered, That Second street between R and T, NE., and R street, between the Metropolitan branch of the Baltimore and Ohio Railroad and the Brentwood road, be paved with asphalt upon deposit by applicant of one-half the cost, \$8,000.

OCTOBER 21, 1890.

Ordered, That lots 1 to 13, both inclusive, block 133, Berleith, assessed to the House of the Good Shepherd, are exempt from general taxes from and including the fiscal year ending June 30, 1891, and part of lot 5, and lots A and B, part of subplot H, square 402, assessed in the same name, heretofore exempt because occupied for the purpose of said institution, are subject to taxation from and including said fiscal year.

OCTOBER 25, 1890.

Ordered, That permission is hereby granted the United States Electric Lighting Company to lay underground conduits, of approved pattern, along the following-named streets and avenues:

On the south side of K street north, from Ninth street west to Washington Circle; in carriageway of Fourteenth street west, from Q street north to Florida avenue; in east sidewalk of New Hampshire avenue, from Washington Circle to Dupont Circle.

The permission shall include the right to place distributing poles in the public alleys along the routes specified, and also in the public alleys in squares 214 and 166, and in the public alleys along those portions of Seventh and Fourteenth streets west, in which the United States Electric Lighting Company now has its underground conduits completed. It being the express understanding and agreement that this permit is not in any way to relieve the said company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the recommendations of the Board of three persons, authorized by the appropriation act of August 6, 1890, for the District of Columbia, to consider the location, arrangement, and operation of electric wires in said District; and it being further understood and agreed that any and all overhead electric-lighting wires of the United States Electric Lighting Company along the routes specified shall be removed within sixty days from the time of completion of the conduits.

All work done under this permit shall be in accordance with the requirements of the engineer department of the District of Columbia.

The work to be done at the sole risk and expense of the United States Electric Lighting Company, under the direction and subject to the requirements of this office, and to be commenced within ten days and completed within forty days.

OCTOBER 31, 1890.

Ordered, That upon the advice of the attorney for the District of Columbia, that the assessment against square 862 for laying water mains in 1885 is bad, because the main was not laid on the petition of the owners of a majority of the property abutting on the street along which the main was laid, and because the assessment was not made within thirty days after the completion of the work, it is ordered that said assessment be, and the same is hereby, canceled and held for naught.

NOVEMBER 1, 1890.

Ordered, That the following apportionment of the remainder of the appropriation for the relief of the poor, for the fiscal year to end June 30, 1891, not apportioned by the order of August 20, 1890, is hereby made:

Physicians to the poor	
Medicine for the poor, and printing	\$6, 720
Central dispensary	3, 700
Homeopathic dispensary, including medicine to the poor	2, 400
Aged Women's Home	430
Eastern Dispensary	300
Women's Dispensary	450
Associated Charities	400
Police distribution	1, 000
Mission School of Cookery	500
Total	100
	16, 000

NOVEMBER 3, 1890.

Ordered, That the president of the parking commission is hereby authorized to transfer to the officers in charge of the Zoölogical Park as many of the trees in the District nurseries, which are unsuitable for street planting, as may be given to the park authorities, without detriment to the District interests, provided the District incur no expense for cost of transfer and transplanting.

NOVEMBER 5, 1890.

Ordered, That the rate of annual rental for the use of land along the borders of the James Creek canal, owned by the District of Columbia, shall hereafter be 3 per cent on the assessed value of said land.

NOVEMBER 7, 1890.

Ordered, That permission is hereby granted the United States Electric Lighting Company to place distributing poles in the public alleys in squares facing on Massachusetts avenue between Ninth street and Florida avenue NW., and on K street between Ninth street and Washington Circle; and that permission is also given said company to connect with its conduit on the south side of Massachusetts avenue the Church of the Ascension, northwest corner Twelfth street and Massachusetts avenue NW.; and to lay underground conduits on Fifteenth street in the west sidewalk from Massachusetts avenue to L street NW.

It being the express understanding and agreement that this permit is not in any way to relieve said company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the recommendation of the Board of three persons, authorized by the appropriation act of August 6, 1890, for the District of Columbia, to consider the location, arrangement and operation of electric wires in said District. And it being further understood and agreed, that any and all overhead electric-lighting wires of the United States Electric Lighting Company along the route specified, shall be removed within sixty days from the time of completion of the conduits.

All work done under this permit shall be in accordance with the requirements of the engineer department of the District of Columbia, the work to be done at the risk and expense of said company under the direction and subject to the requirements of this office, to be commenced within ten days from this date and completed within forty days thereafter.

NOVEMBER 8, 1890.

Ordered, That no permits or license for merry-go-rounds will hereafter be issued without the special approval of the Commissioners in each case.

NOVEMBER 10, 1890.

Ordered, That permission is hereby granted the Metropolitan Railroad Company to use cobblestones in paving between the grooved rails of its tracks on F street from Fifth to Ninth NW.

NOVEMBER 11, 1890.

Ordered, Deeming it conducive to the public interests to open T street NW., from Rhode Island avenue extended to Second street NW. extended, the Commissioners of the District of Columbia have had the route surveyed and a plat thereof prepared and filed in this office. In compliance with the requirements of law, notice is hereby given of the proposed opening of the highway aforesaid, and that all persons who have objections to present thereto are called upon to attend at this office at 2 o'clock p. m. on Thursday, the 4th day of December, 1890, at which time the Commissioners will give hearing to all persons in interest.

NOVEMBER 13, 1890.

Ordered, That the assessment for sewer made against sublots 1, 2, 3, and 4, square 245, will be canceled upon the records of the special assessment division, for the reason that the property is exempt from such taxes while used for educational purposes.

Ordered, That permit be issued to the U. S. Coast and Geodetic Survey to construct small frame building on ground occupied by said department between South Capitol street and New Jersey avenue SE., for use as an observatory for testing instruments, provided that the sides of the building, as well as the roof, be covered with incombustible material.

NOVEMBER 14, 1890.

Ordered, That the Anacostia and Potomac River Railroad Company is prohibited from using old granite blocks between the rails of its tracks, but shall use new granite blocks of the proper size, to be laid according to the District specifications for such work under the supervision of the engineer department.

That said company shall also repave with granite blocks the portion of the space between its rails at the approaches to Anacostia bridge now paved with cobblestone, said granite blocks to be the same quality as those now used by the District and to be laid according to District specifications, under the supervision of the engineer department.

NOVEMBER 15, 1890.

Ordered, That paragraph "h" of section 4 of the regulation for licensing the sale of intoxicating liquors is hereby amended to read as follows:

When an application for a liquor license has been rejected by the Commissioners the same will not be reconsidered upon the same showing nor upon purely cumulative evidence. To obtain such reconsideration a written motion must be filed with the assessor within five days after rejection of application, clearly setting forth the new and independent facts or reasons upon which a review is asked (with all the evidence in support thereof), and if rejected a second time there will be no further consideration of that application during the then current license year.

NOVEMBER 17, 1890.

Ordered, That permission is hereby granted the Western Union Telegraph Company to replace the defective and unsound poles on the line commencing at corner of Fourteenth and E streets NW.; thence

along Fourteenth street to Ohio avenue; thence on Ohio avenue to Twelfth street; thence along Twelfth street to Virginia avenue; thence along Virginia avenue to I street SE.; thence along I street to Thirteenth street; thence along Thirteenth street to Tennessee avenue and to Fifteenth and Boundary streets NE.: *Provided*, That no additional wires be strung and that said work be done at the risk and expense of said company.

NOVEMBER 19, 1890.

The attorney for the District having advised the Commissioners, on the authority of *Brewer vs. The District* (5 Mackey, 274), that assessment certificates against lot 5, square 332 lot 9 in square 792, lot 2 in square 800, and lots 6 and 7 in square 847, presented by Mr. Allen C. Clark for redemption under the act of Congress approved June 2, 1890, were invalidated because not included in the special tax sale of January 3, 1876:

Ordered, This 19th day of November, 1890, that said certificates and assessments be, and the same are hereby, canceled of record and held for naught. (For further order see No. 3, December 10, 1890.)

NOVEMBER 25, 1890.

Ordered, That under the provisions of the law of the late corporation of Washington of November 4, 1842 (sec. 3, page 2, Webb's Digest), William H. Pritchett, Thomas B. Kalbfus, and Benjamin N. Meeds are hereby appointed a special commission to levy a tax with which to satisfy the damages that have accrued from the opening of an alley in square 306, and to make return of such under oath to the Commissioners of the District of Columbia.

DECEMBER 3, 1890.

Ordered, That for the purpose of exhibiting the arc gas lamp the American Gas Controller and Fixture Company, through its agent, F. W. Sanborn, is hereby granted permission to put up about twenty consecutive lamps on K street or Connecticut avenue NW., to remain during the pleasure of the Commissioners; the work to be done solely at the expense and risk of the company, and the existing posts and lanterns to be restored to their original condition upon demand of the Commissioners; it being distinctly understood that the District is to be subject to no expense on any account in connection with this matter and to be under no obligation to use the lamps.

DECEMBER 5, 1890.

Ordered, That permission is hereby granted the United States Electric Lighting Company to lay underground conduits on north sidewalk of Rhode Island avenue from Scott Circle into squares 195 and south 195, with distributing poles in alley of square 195; also under east sidewalk on Fifteenth street NW., from Albaugh's alley to Pennsylvania avenue.

It being the express understanding and agreement that this permit is not in any way to relieve the United States Electric Lighting Company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the recommendation of the board of three persons authorized by the appropriation act of

August 6, 1890, for the District of Columbia, to consider the location, arrangement, and operation of electric-lighting wires in said District; and it being further understood and agreed that any and all overhead electric wires of the United States Electric Lighting Company along the route specified shall be removed within sixty days from the time of the completion of the conduits.

All work to be done under this permit shall be in accordance with the requirements of the engineer department of the District of Columbia.

The work to be done at the sole risk and expense of the United States Electric Lighting Company, under the direction and subject to the requirements of this office, to be commenced within ten days from this date and completed within forty days thereafter.

DECEMBER 8, 1890.

Ordered, That hereafter whenever any permit is issued to make cuts in the streets, except small cuts made by plumbers, that the permit be made in duplicate; one copy to be sent to the superintendent of police, who will send a copy of the same to the police precinct in which the work is to be done, in order that the police may know on what conditions the permit is granted and be able to enforce their performance.

DECEMBER 13, 1890.

Ordered, That permission is hereby granted the Washington Gas-light Company to lay gas mains in east sidewalk space of Fourteenth street, between Howard avenue and Yale street; the location of said main to be so determined after consultation with the superintendent of the water department, in order that it may not interfere with the construction of the water main soon to be laid in the same sidewalk.

Ordered, That section 2 of article 4 of the police regulations in and for the District of Columbia is hereby amended by adding thereto the following:

The police officers on duty at the railroad depots shall remove from the hack stands at said depots any hotel coach whose driver is found soliciting, on a special stand at either of said depots, for passengers to other destinations than the hotel which he represents.

Whereas the damages awarded by the jury of seven summoned by the United States marshal for the District of Columbia in compliance with a request from the Commissioners on the 28th day of November, 1890, for the condemnation of land for the laying out of T street, from Lincoln avenue to Second street NE., in the District of Columbia, are decreed grossly excessive by the Commissioners, and they have declined to accept the findings of said jury; and

Whereas the Commissioners are unable to agree with the owners of the parcels of ground proposed to be taken and the improvements thereon:

The said marshal is hereby requested and directed to summon a jury of twelve judicious, disinterested men, not related to any party interested, to be and appear on the premises on a day to be fixed by said

marshal to assess the damages, if any, which the owner or owners of and through which said street is proposed to be laid out, as shown on the accompanying plat, may sustain by reason thereof.

DECEMBER 15, 1890.

Ordered, That the major of police cause the obstruction in Linden street, in Le Droit Park, to be removed at once, and the streets in said park hereafter kept free from illegal obstruction.

DECEMBER 22, 1890.

Ordered, That permission is hereby granted the United States Electric Lighting Company to connect by means of underground conduits in alleys their conduit already in place on the west side of Fourteenth street NW., with poles now erected in alleys leading into squares abutting on the west side of the said Fourteenth street, it being understood that no permission is hereby granted to extend any conduits in any street or avenue, and that this permit will expire by limitation on December 31, 1890.

It being also the express understanding and agreement that this permit is not in anyway to relieve the said company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the recommendations of the board of three persons authorized by the appropriation act of August 6, 1890, for the District of Columbia, to consider the location, arrangement, and operation of the wires in said District.

All work under this permit shall be in accordance with the requirements of the Engineer Department of the District of Columbia, at the sole risk and expense of the United States Electric Lighting Company.

DECEMBER 30, 1890.

Ordered, On application to the Commissioners by residents of the District outside the limits of Washington and Georgetown for the extension of T street, from First street to Le Droit avenue, and after notice of such extension by advertisement twice a week for three weeks, it is ordered that the said extension of T street be made according to the plat on file in this office, and the marshal of the United States for the District of Columbia is hereby requested and directed to summon a jury of seven judicious, disinterested men not related to any party interested, to be and appear on the premises on a day to be fixed by said marshal to assess the damages, if any, which the owner or owners of land through which said street is proposed to be extended and laid out, as shown on said plat, may sustain by reason thereof.

JANUARY 3, 1891.

Ordered, That the cemetery committee of the Congressional Cemetery is hereby given permission to construct at its own expense a good tight fence in the center of G street SE., from the Eastern Branch to the brick wall of said cemetery. The smooth side of the fence shall be placed on the side next to the asylum grounds. The committee will notify the intendant of the Washington Asylum when it will begin work on the fence.

JANUARY 7, 1891.

Ordered, That the order of August 4, 1879, extending the area for taking up and impounding domestic animals found running at large is hereby extended to include the area within all improved subdivisions within the District of Columbia.

JANUARY 8, 1891.

Ordered, That the assessment for special improvements under the compulsory permit system against lot 11, square 1034, be canceled, for the reason that the property is occupied for church purposes.

JANUARY 10, 1891.

Ordered, That all taxes against lot 65 of E. Falconer's subdivision of lots in square 271, prior to September 27, 1887, the date of sale of said property for arrears of taxes, shall be canceled upon the tax records of the District, in pursuance of the decision of the court that all arrears of taxes omitted from the tax sale be void.

Ordered, That Klinge road west of Rock Creek be straightened as recommended by the engineer department, at an estimated cost of between \$400 and \$500.

Ordered, That the following special assessments under the act of August 6, 1890, are hereby approved, viz: Paving alley, square 917; sewer in alleys, square 870; sewer in alley, square 167; sidewalk on Q street, front square 112; paving alley, square 501; sidewalk on Q street, square 111; sewer in alley, square 569; paving alley, square 190.

Ordered, That until further orders the major of police shall keep clear of obstruction the road in the county of Washington called Linden street, from which the fence closing the same at LeDroit Park has been removed.

JANUARY 12, 1891.

Ordered, That deeming it conducive to the public interest to widen Cincinnati street and Twenty-second street, at the southeast corner of block 14, Langdon Park, the Commissioners have had the route surveyed and the plat thereof prepared and filed in this office, in compliance with the requirements of law, and notice is hereby given of the proposed widening of the highway aforesaid, and that all persons having objections to present thereto are called upon to attend at this office, at 2 o'clock p. m. on Tuesday, the 3d day of February, 1891, at which time the Commissioners will give hearing to all persons in interest.

JANUARY 14, 1891.

Ordered, That entrances to Acker street, between Sixth and Seventh streets N.E., be opened by removing brick sidewalk and curb so as to allow vehicles to use this street, and that temporary flag and cobble

crossing be laid, at estimated cost of \$75, payable from appropriation for current repairs to streets, etc.

JANUARY 16, 1891.

Ordered, That the order passed on the 14th day of May, 1890, with regard to the number of retail liquor licenses, and the accompanying instructions issued to the assessor of the District of Columbia be, and the same are hereby, rescinded.

Ordered, That the following be substituted for section 6 of the order of April 26, 1887, making regulations for the examination and licensing of steam engineers in the District of Columbia, viz:

The applicant for license must be not less than 21 years of age, a resident of the United States for at least one year preceding his application, and of temperate habits. He must state in his application his full name and age, whether married or single, his residence, present place of employment, if so employed, what experience he has had in steam engineering, with whom he has worked, etc., and likewise furnish a general description of the plant of which he proposes to take charge, including dimensions, purposes, and character.

And that the order of July 25, 1888, modifying the term of engineer licenses fixed by order of June 20, 1888, is hereby revoked, and such term shall hereafter be one year.

JANUARY 21, 1891.

Ordered, That the owners of houses 602 to 616 C street NE. are hereby notified to remove, within 60 days from date, so much of the parking in front of said houses as encroaches on the sidewalk beyond the line of parking east of said premises; and in case of their refusal or neglect to do so the removal shall be effected by the proper District officers.

Ordered, That the attorney, the assessor, and the special assessment clerk are hereby appointed a committee to prepare and report to the Commissioners, as soon as practicable, a draft of a proviso to be added to the pending District appropriation bill to assess the proportional cost of improvements under the compulsory permit system more equitably than such assessments are made under the existing law and regulations.

Ordered, That any permission heretofore granted by the District authorities for the storage of explosives in magazines near the village of Harlem, on the Conduit road, is hereby revoked, and said magazines shall be removed within sixty days after date.

Permission is hereby granted the United States Electric Lighting Company to lay underground conduit from Fourteenth and V streets west, along north side of V street to first alley; thence along the said alley to cable pole in square 203; also to lay a branch conduit from the

north side of V street, between Fourteenth and Fifteenth streets, west, across V street to the cable pole at the mouth of the alley in square 204.

Permission is also granted to place distributing poles for electric-lighting purposes in the alleys in the squares abutting directly on Fourteenth street NW., between Rhode Island and Florida avenues, but no pole shall be erected in any street or avenue, and each pole shall be so placed as not to interfere with the free use of the alley in which it is placed or with the entrance to or exit from private property:

It being the express understanding and agreement that this permit is not in any way to relieve the United States Electric Lighting Company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance of, or otherwise of the recommendation of the Board of three persons authorized by the appropriation act of August 6, 1890, for the District of Columbia, to consider the location, arrangement, and operation of electric wires in said District; and it being further understood and agreed that any and all overhead electric-lighting wires of the United States Electric Lighting Company along the route specified shall be removed within sixty days from the time of completion of the conduit.

All work done under this permit shall be in accordance with the requirements of the engineer department of the District of Columbia.

The work to be done at the sole risk and expense of the United States Electric Lighting Company, under the direction and subject to the requirements of this office, to be commenced within ten days from this date and completed within forty days thereafter.

JANUARY 22, 1891.

Ordered, That the order of December 13, 1890, requiring all registered plumbers who filed their bonds prior to January 1, 1890, to furnish new bonds, is hereby revoked.

JANUARY 23, 1891.

Ordered, That hereafter the major of police will prevent the collection of carriages for funeral purposes in front of and adjacent to undertakers' establishments, but such vehicles may be assembled in the vicinity of the house in which the funeral services are held.

[MEMO.—This is not intended as an amendment or addition to police regulations, but as an instruction to major of police to prevent undue obstruction of the street.]

JANUARY 28, 1891.

Ordered, That the Washington and Georgetown Railroad Company is hereby directed to lay its tracks and conduits for its cable line on Fourteenth street extended in time for the contractor for asphaltting the roadway on said street to begin work not later than May 1, 1891.

JANUARY 31, 1891.

The Commissioners of the District of Columbia unite with the people of the country in lamenting the sad and unexpected demise of the Hon. William Windom, the late Secretary of the Treasury. In token of their

sorrow, and as an expression of their respect for his memory, it is by the Commissioners

Ordered, That the offices of the District government be closed the entire day on Monday the 2d day of February, 1891, the day designated for the funeral.

FEBRUARY 4, 1891.

Ordered, That the following report of the commission appointed to determine the question in issue between the inspector of buildings and George J. Mueller as to the character and condition of the east party or division wall of the house 338 Pennsylvania avenue NW. is hereby approved, and will be carried into effect, viz:

That they have examined the question at issue, the plans of the proposed building and the wall in question, and find that the said wall is not suitable for the purposes of the proposed building, and that the wall be condemned in accordance with section 4, paragraph 12, of the building regulations of the District of Columbia.

Ordered, That in order to provide against the posting of any placard bill or advertisement of an immoral character, no bills shall be posted until they have been submitted to and approved by the captain of the metropolitan police as displaying nothing objectionable under the law regulating this subject.

FEBRUARY 6, 1891.

Ordered, That section 1, article 9 of the police regulations in and for the District of Columbia is hereby amended so as to require on all electric and cable cars, the striking of gong at every street crossing and where otherwise required to give warning.

Ordered, That section 14, article 10, of said regulations is amended so as to allow of a maximum speed of 9 miles an hour except at such points as may from time to time be designated by the Commissioners; at present at the crossing of Pennsylvania avenue and F street by the Washington and Georgetown Railroad Company the speed shall be limited to 5 miles an hour.

FEBRUARY 13, 1891.

Ordered, That the Independent Ice Company is hereby permitted to repair its wharf on Water street, between Ninth and Tenth streets, and to extend said structure not more than 30 feet into the river on condition that it be kept inside the harbor line, and that the work and limits be subject to the supervision of the engineer department.

FEBRUARY 16, 1891.

The Commissioners of the District of Columbia unite with the people of the country in lamenting the demise of Admiral D. D. Porter; and in token of their sorrow and as an expression of their respect for his memory it is

Ordered, That the offices of the District government be closed the entire day on Tuesday, the 17th instant, the day designated for the funeral.

The Commissioners of the District of Columbia unite with the people of the country in lamenting the demise of General William T. Sherman, and in token of their sorrow and as an expression of their respect for his memory, it is

Ordered, That the offices of the District government be closed the entire day on Saturday, the 21st instant, the date designated for the funeral.

FEBRUARY 19, 1891.

Ordered, That whenever an application for a barroom license is not accompanied by the necessary signers the assessor shall at once notify the applicant in writing of the fact, and if the requirement is not complied with in a reasonable time, not exceeding ten days from date of notification, the assessor shall notify the applicant that his application is disapproved by order of the Commissioners and that he must withdraw his license deposit at once.

The assessor will also notify the major of police of the action taken in each case.

FEBRUARY 24, 1891.

Ordered, That the map showing plan of conduit and general method of construction of the new cable line of the Washington and Georgetown Railroad Company on Fourteenth street west and Pennsylvania avenue is hereby approved.

FEBRUARY 28, 1891.

Ordered, That permission is hereby given the National Automatic Fire Alarm Company of Washington to make such connection with the central office of the fire-alarm telegraph of the District of Columbia as shall be proper and necessary to the successful operation of said company's system. This permit does not authorize the erection of wires, poles, or other appurtenances on, over, or under the public highways. All work done under this permit shall be subject to the supervision of the superintendent of the telegraph and telephone service of the District of Columbia.

MARCH 2, 1891.

Ordered, That the Norfolk and Washington (D. C.) Steamboat Company is hereby granted permission to extend the Seventh-street wharf, as shown on this sketch herewith, subject to the conditions hereafter given.

All work to be done at their own risk and expense, and to be finished three months from this date.

This permit is granted by the Commissioners of the District of Columbia, and is accepted by the Norfolk and Washington (D. C.) Steamboat Company, on the express condition that it is not in anywise to be construed as a recognition by the District or by the United States of any right or title to said wharf; without in anywise affecting the question of title. And the said Norfolk and Washington (D. C.) Steamboat Company do further agree that, should the United States or the District of Columbia obtain possession of said wharf, then the said steamboat company will make any and all changes in said wharf that may be required by the United States or the District of Columbia.

MARCH 3, 1891.

Ordered, Permission is hereby granted the United States Electric Lighting Company to lay underground conduits upon streets and avenues as set forth below:

First street west from Pennsylvania avenue to B street south, thence on said Pennsylvania avenue to Eleventh street east, a distance of about 7,400 feet; and on Seventh street west from B street north to Water street, thence on Water street to P street south, a further distance of about 7,250 feet, or a total distance of about 14,650 linear feet.

Permission is also hereby granted to lay a further distance, not to exceed a total of 11,750 linear feet, on such streets and avenues or parts thereof as may be selected by the United States Electric Lighting Company from the following list, provided that the aggregate length of conduit laid under the provisions of this permit shall not exceed 5 miles, or 26,400 feet, as provided in the District appropriation act approved March 3, 1891; and the United States Electric Lighting Company shall give notice in writing to the Commissioners of the District of Columbia of the streets and avenues or parts thereof thus selected before commencing any construction under the terms of this permit.

Eighteenth street west from Massachusetts avenue to Florida avenue; Sixteenth street west from Massachusetts avenue to Florida avenue; Rhode Island avenue from Fourteenth street to Seventh street; C street west from Four-and-a-half to Second street west; Madison street from Pennsylvania avenue to H street, and H street from Madison street to Seventeenth street; Eighth street SE. from Pennsylvania avenue to I street; New Hampshire avenue from Washington Circle to Dupont Circle; H street north from Seventh street west to Fifteenth street east; East Capitol street from First street to Eleventh street; First street east from East Capitol street to B street south; Rhode Island avenue from Scott Circle to Fourteenth street west.

It being the express understanding and agreement that this permit is not in any way to relieve the United States Electric Lighting Company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the board of three persons authorized by the appropriation act of August 6, 1890, for the District of Columbia, to consider the location, arrangement, and operation of all electric wires in said District; and it being further understood and agreed that any and all overhead cables and wires and all poles of the United States Electric Lighting Company, along the streets and avenues specified, shall be removed at the expense of the said company within the shortest practicable time after the completion and full equipment of the conduits.

All work done under this permit shall be in accordance with the requirement of the engineer department of the District of Columbia.

The work to be done at the sole risk and expense of the United States Electric Lighting Company, under the direction and subject to the requirement of this office: to be commenced within sixty days from this date and completed within one hundred and eighty days thereafter, unless further extended by the Commissioners of the District of Columbia.

No part of the said conduits or any of them shall be laid elsewhere than in the carriageway of the streets and avenues upon which they are authorized to be laid, and the said United States Electric Lighting Company shall, before commencing work hereunder, deposit with the collector of taxes, District of Columbia, in such sums and at such time as the same may from time to time, during the progress of the work, be demanded by the Commissioners, an amount sufficient to meet the estimated cost of restoring all street surfaces disturbed to good condition.

MARCH 3, 1891.

Accepted:

A. A. THOMAS,
President United States Electric Lighting Company.

Ordered, That permission is hereby granted the Chesapeake and Potomac Telephone Company to lay underground conduits for telephone purposes in the following-named streets and avenues in the city of Washington, District of Columbia:

Beginning at proposed new exchange, west side of Fourteenth street, between H and I streets, running north on Fourteenth street to I street with five-eighth duct pipes; thence north on Fourteenth street to K street with four 8-duct pipes; thence north on Fourteenth street to H street, with one 8-duct pipe; thence northeast on Vermont avenue to Rhode Island avenue with one 6-duct pipe; thence on Rhode Island avenue to Ninth street, and on Ninth street to Boundary; thence on Boundary to Eighth street with one 6-duct pipe, with a branch from Rhode Island avenue into alley in square 364; also branch at intersection of Vermont and Rhode Island avenues into square 241; also branch at Vermont avenue and M street, running east along M street to Ninth street, north on Ninth street to alley in square 400, with one 6-duct pipe. Beginning at Fourteenth and K streets and running west on K street to Fifteenth street, with three 8-duct pipes; thence on K street to Seventeenth street with three 6-duct pipes; thence on K street to Nineteenth street with two 8-duct pipes; thence on K street to Twentieth street with one 8-duct pipe; thence north on Twentieth street to M street, and on M street to Thirty-first street with one 6-duct pipe; thence north on Thirty-first street to and into alley in square 38.

Branch at Nineteenth and K streets, to run north on Nineteenth to O street with one 8-duct pipe; thence north on Nineteenth street to Q street with one 6-duct pipe; thence with branches into squares 93, 111, and 134. Also branch on Nineteenth street into squares 140 and 117.

Branch beginning at Fifteenth and K streets, running north on Fifteenth street to O street with one 8-duct pipe, thence west on O street to and into alley in square 181, with branch from Fifteenth street into square 197.

Beginning at proposed new Exchange on Fourteenth, between H and I streets, running south on Fourteenth to G street with seven 8-duct pipes, thence south on Fourteenth street to Pennsylvania avenue, with

five 8-duct pipes, thence south on Fourteenth street to D street, east to Thirteenth street, south to C street, east to Twelfth street, with two 8-duct pipes; thence south on Twelfth street to Virginia avenue SW., and on Virginia avenue to Ninth street SW., with one 8-duct pipe; thence south on Ninth to E street; thence east on E street to and into alley in square 412 with one 6-duct pipe.

Branch Fourteenth and G streets, NW., running easterly to Tenth street, with two 8-duct pipes; thence on Tenth to F, east on F to and into alley in square 377.

Branch Thirteenth and F streets, NW., to and into alley in square 254.

Branch beginning at Fourteenth and Pennsylvania avenue running east on E to Twelfth street, with three 8-duct pipes; thence east on E street to Tenth street, with three 6-duct pipes; thence east on E to Ninth street; thence south on Ninth to D street; thence east on D to Sixth street, with two 8-duct pipes.

It being the express understanding and agreement that this permit is not in any way to relieve the Chesapeake and Potomac Telephone Company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the recommendation of the board of three persons, authorized by the appropriation act of August 6, 1890, for the District of Columbia, to consider the location, arrangement, and operation of electric wires in said District, and it being further understood and agreed that any and all overhead cables and wires and all poles of the Chesapeake and Potomac Telephone Company along the streets and avenues specified shall be removed at the expense of the said company within the shortest practicable time after the completion and full equipment of the conduits.

All work done under this permit shall be in accordance with the requirements of the engineer department of the District of Columbia.

The work to be done at the sole risk and expense of the Chesapeake and Potomac Telephone Company, under the direction and subject to the requirement of this office, to be commenced within sixty days from this date and completed within one hundred and eighty days thereafter, unless further extended by the Commissioners of the District of Columbia.

No part of the said conduits, or any of them, shall be laid elsewhere than in the carriage way of the streets and avenues upon which they are authorized to be held, and the said Chesapeake and Potomac Telephone Company shall, before commencing work hereunder, deposit with the collector of taxes, District of Columbia, in such sums and at such time as the same may, from time to time during the progress of the work, be demanded by the Commissioners, an amount sufficient to meet the estimated cost of restoring all street surfaces disturbed to good condition.

The aggregate length of all conduits or subways constructed hereunder shall not exceed 5 miles, as prescribed in the District appropriation act approved March 3, 1891.

Accepted for the Chesapeake and Potomac Telephone Company.

SAMUEL M. BRIAN, *President.*

March 3, 1891.

MARCH 4, 1891.

Ordered, That permission is hereby granted the United States Electric Lighting Company to erect iron lamp poles for electric arc lamps on Fourteenth street NW., between H street and Florida avenue, in-

All work done under this permit shall be in accordance with the requirement of the engineer department of the District of Columbia.

The work to be done at the sole risk and expense of the United States Electric Lighting Company, under the direction and subject to the requirement of this office; to be commenced within sixty days from this date and completed within one hundred and eighty days thereafter, unless further extended by the Commissioners of the District of Columbia.

No part of the said conduits or any of them shall be laid elsewhere than in the carriageway of the streets and avenues upon which they are authorized to be laid, and the said United States Electric Lighting Company shall, before commencing work hereunder, deposit with the collector of taxes, District of Columbia, in such sums and at such time as the same may from time to time, during the progress of the work, be demanded by the Commissioners, an amount sufficient to meet the estimated cost of restoring all street surfaces disturbed to good condition.

MARCH 3, 1891.

Accepted:

A. A. THOMAS,
President United States Electric Lighting Company.

Ordered, That permission is hereby granted the Chesapeake and Potomac Telephone Company to lay underground conduits for telephone purposes in the following-named streets and avenues in the city of Washington, District of Columbia:

Beginning at proposed new exchange, west side of Fourteenth street, between H and I streets, running north on Fourteenth street to I street with five-eighth duct pipes; thence north on Fourteenth street to K street with four 8-duct pipes; thence north on Fourteenth street to H street, with one 8-duct pipe; thence northeast on Vermont avenue to Rhode Island avenue with one 6-duct pipe; thence on Rhode Island avenue to Ninth street, and on Ninth street to Boundary; thence on Boundary to Eighth street with one 6-duct pipe, with a branch from Rhode Island avenue into alley in square 364; also branch at intersection of Vermont and Rhode Island avenues into square 241; also branch at Vermont avenue and M street, running east along M street to Ninth street, north on Ninth street to alley in square 400, with one 6-duct pipe. Beginning at Fourteenth and K streets and running west on K street to Fifteenth street, with three 8-duct pipes; thence on K street to Seventeenth street with three 6-duct pipes; thence on K street to Nineteenth street with two 8-duct pipes; thence on K street to Twentyninth street with one 8-duct pipe; thence north on Twentyninth street to M street, and on M street to Thirty-first street with one 6-duct pipe; thence north on Thirty-first street to and into alley in square 38.

Branch at Nineteenth and K streets, to run north on Nineteenth to O street with one 8-duct pipe; thence north on Nineteenth street to Q street with one 6-duct pipe; thence with branches into squares 93, 111, and 134. Also branch on Nineteenth street into squares 140 and 117.

Branch beginning at Fifteenth and K streets, running north on Fifteenth street to O street with one 8-duct pipe, thence west on O street to and into alley in square 181, with branch from Fifteenth street into square 197.

Beginning at proposed new Exchange on Fourteenth, between H and I streets, running south on Fourteenth to G street with seven 8-duct pipes, thence south on Fourteenth street to Pennsylvania avenue, with

five 8-duct pipes, thence south on Fourteenth street to D street, east to Thirteenth street, south to C street, east to Twelfth street, with two 8-duct pipes; thence south on Twelfth street to Virginia avenue SW., and on Virginia avenue to Ninth street SW., with one 8-duct pipe; thence south on Ninth to E street; thence east on E street to and into alley in square 412 with one 6-duct pipe.

Branch Fourteenth and G streets, NW., running easterly to Tenth street, with two 8-duct pipes; thence on Tenth to F, east on F to and into alley in square 377.

Branch Thirteenth and F streets, NW., to and into alley in square 254.

Branch beginning at Fourteenth and Pennsylvania avenue running east on E to Twelfth street, with three 8-duct pipes; thence east on E street to Tenth street, with three 6-duct pipes; thence east on E to Ninth street; thence south on Ninth to D street; thence east on D to Sixth street, with two 8-duct pipes.

It being the express understanding and agreement that this permit is not in any way to relieve the Chesapeake and Potomac Telephone Company from a full and complete compliance with any and all acts of Congress hereafter passed in pursuance or otherwise of the recommendation of the board of three persons, authorized by the appropriation act of August 6, 1890, for the District of Columbia, to consider the location, arrangement, and operation of electric wires in said District, and it being further understood and agreed that any and all overhead cables and wires and all poles of the Chesapeake and Potomac Telephone Company along the streets and avenues specified shall be removed at the expense of the said company within the shortest practicable time after the completion and full equipment of the conduits.

All work done under this permit shall be in accordance with the requirements of the engineer department of the District of Columbia.

The work to be done at the sole risk and expense of the Chesapeake and Potomac Telephone Company, under the direction and subject to the requirement of this office, to be commenced within sixty days from this date and completed within one hundred and eighty days thereafter, unless further extended by the Commissioners of the District of Columbia.

No part of the said conduits, or any of them, shall be laid elsewhere than in the carriage way of the streets and avenues upon which they are authorized to be held, and the said Chesapeake and Potomac Telephone Company shall, before commencing work hereunder, deposit with the collector of taxes, District of Columbia, in such sums and at such time as the same may, from time to time during the progress of the work, be demanded by the Commissioners, an amount sufficient to meet the estimated cost of restoring all street surfaces disturbed to good condition.

The aggregate length of all conduits or subways constructed hereunder shall not exceed 5 miles, as prescribed in the District appropriation act approved March 3, 1891.

Accepted for the Chesapeake and Potomac Telephone Company.

SAMUEL M. BRIAN, *President.*

March 3, 1891.

MARCH 4, 1891.

Ordered, That permission is hereby granted the United States Electric Lighting Company to erect iron lamp poles for electric arc lamps on Fourteenth street NW., between H street and Florida avenue, in-

clusive, and to connect the said poles with the existing conduit of the said company along the route named, provided that the poles set shall in pattern and location conform to the requirements of the engineer department of the District of Columbia; that no cross arm shall be mounted on any pole, and that no overhead wires of any kind shall be stretched upon or come in contact with any pole.

The work to be done at the sole risk and expense of the said company, to be commenced within ten days from the date of this permit, and completed within thirty days thereafter.

Ordered, That in pursuance of the act of February 28, 1891, no more wholesale or retail liquor licenses shall be issued to any person or place within 1 mile of any portion or part of the place or property known as Soldiers' Home, and all such portions of deposits for such licenses as applicants are entitled to under law shall be refunded.

MARCH 6, 1891.

Ordered, That hereafter any person before excavating and grading for buildings and public work shall deposit with the collector of taxes \$25 in each case as a guaranty that all deposits of material incident to such work shall be removed from streets, roads, and alleys, and damages that may result from such deposits made good, or, in case of failure to make such removals, that the District may do the necessary work therefor and pay the expense from the amount of such deposit. The certificate of the collector of taxes that such deposit has been made must, before the issue of such permit, be filed with the officer issuing the permit for the excavation, and be retained by said officer until notified by the officer in charge of the engineer department to return it. All permits for sewer, water, or other house connections or repairs thereto shall hereafter be issued by the permit clerk of the engineer department.

MARCH 9, 1891.

Ordered, That permission is hereby given to the Riggs Fire Insurance Company to erect at its own expense on the building, No. 1331 F street NW., a 700-pound bell and connect the same with the fire-alarm system of the District of Columbia, so that fire alarms and the usual hours may be struck upon it. The erection of the bell and the connection to be subject to the supervision and approval of the inspector of buildings and the superintendent of telegraph and telephone service.

Ordered, That the major of police is authorized to issue permit to L. H. Simpson to do blasting and quarrying on lands lying along Canal road, between New Cut road and the new receiving reservoir on the property owned by the Palisades of the Potomac Land Improvement Company, for the purpose of building wells, etc., on condition that the parties doing the blasting take the necessary precautions for the safety of the public.

MARCH 13, 1891.

Ordered, That permission is hereby granted the Washington Gaslight Company to lay main in roadway of Ward Place between the curb and sewer, the service stop boxes to be placed in sidewalk at the curb; and lay gas main in roadway of Woodley Lane road between Nineteenth street extended and the new bridge.

MARCH 16, 1891.

Ordered, That permission is hereby granted the Anacostia and Potomac River Railroad Company to open G street from Eleventh street to Seventeenth street SE.; Seventeenth street from G street to E street, and E street from Seventeenth street, to the eastern entrance of the Congressional Cemetery, SE., provided that no more than two squares shall be open at any one time north and two squares south of Pennsylvania avenue, that all cross streets shall be kept open during the progress of the work; work to be done in accordance with the grades to be furnished said company by the computing engineer.

That said company is also allowed to open Nichols avenue, Anacostia, between Jefferson and Pleasant streets, for the purpose of laying an equilateral turn-out.

Ordered, That a 4-foot plank sidewalk of Virginia pine lumber be laid on the Bunker Hill road, from Fourth street NE. to the Brookland post-office, at estimated cost of \$500, payable from the appropriation for county roads.

Ordered, That the order of May 12, 1890 is so amended (1) as to transfer the office of inspector of plumbing from the special charge of Commissioner Ross to the special charge of Commissioner Robert; (2) as to transfer the office of property clerk from the special charge of Commissioner Robert to the special charge of Commissioner Douglass; (3) as to transfer from Commissioner Robert to Commissioner Douglass the consideration of the general routes of street railroads.

MARCH 17, 1891.

Notice is hereby given that commencing on Tuesday, the 7th day of April, 1891, and continuing on each following day, Sundays and legal holidays excepted, until all the property hereinafter designated shall be sold, and between the hours of 10 o'clock in the forenoon and 4 o'clock in the afternoon of each of said days, we shall, in the office of the collector of taxes of the District of Columbia, sell at public auction to the highest bidder or bidders, the real estate described in the subjoined list of taxes and assessed in the names therein appearing for default in the payment of taxes levied thereon and in arrears on the 1st day of July, 1890, and interest and penalties thereon to said 7th day of April, 1891.

MARCH 17, 1891.

Ordered, That consequent upon the construction of the new cable route of the Washington and Georgetown Railroad Company, all necessary changes to water pipes be made on Fourteenth street extended,

between Florida avenue and Park street, upon deposit by said company of the estimated cost of \$479.67; the replacement of improved pavements, the furnishing of unskilled labor, and the protection and guarding of trenches to be provided for by said company.

MARCH 19, 1891.

Ordered, That the following is hereby substituted for section 7 of the plumbing regulations, made January 25, 1881, viz:

SEC. 7. It shall not be lawful for any person or persons to connect any house, building, premises, or establishment with any water main, public sewer, or gas main, or with any service pipe for water, or with any house sewer, without a permit obtained from the Engineer Commissioner before commencing any part of the work of connection. The provisions of this paragraph shall apply to all water mains, sewers, and water-service pipes, whether on private property or in the public streets, avenues, alleys, roads, or spaces, and to each separate building, whether situated on the same or different lots, and connected or proposed to be connected with any water main, water-service pipe, public or private sewer or gas main. The conditions of this permit must be strictly complied with and the work must be done by the plumber in whose name the permit is given.

All plumbers are required to notify the Engineer Commissioner of any and all extensions or alterations of water fixtures and pipes made inside of buildings, in order that the same may be examined.

MARCH 20, 1891.

Ordered, That the regulations made for the examining and licensing of steam engineers in the District of Columbia are hereby amended as follows:

That the ninth paragraph of said regulations, made April 26, 1887, is hereby amended to read as follows:

Immediately after each examination the secretary of the board of examiners will make a report to the Commissioners in each case, transmitting the recommendation of the board, accompanied by the application and indorsements. If approved by the Commissioners a license will be issued by the assessor of the District of Columbia in the name of the applicant, signed by the chairman of the board of examiners and countersigned by said assessor.

That the last paragraph of the regulations dated January 16, 1891, be amended so as to read as follows:

That the order of July 25, 1888, modifying the term of engineer licenses fixed by order of June 20, 1888, is hereby revoked and such term shall hereafter be one year from April 1 of each year.

That hereafter the fee required for a license as steam engineer in the District of Columbia shall be deposited with the collector of the District of Columbia, before application for such license is made, and the receipt of the collector for said fee shall be filed with the application. If the applicant fails to pass the required examination, the fee will be refunded upon the certificate of the secretary of the board of examiners of steam engineers of said failure.

That anyone to whom license shall be issued without being located shall notify the board of examiners of steam engineers of the location of the plant under his charge within ten days after taking charge of the same, and for failure to comply with this regulation his license shall be revoked.

That all licensed steam engineers shall cause their licenses to be neatly framed and hung in some conspicuous place in or about the engine or boiler rooms where they are employed.

MARCH 23, 1891.

Ordered, That permission is hereby granted the Washington Gas-light Company to lay a gas main under the sidewalk of Wyoming avenue, from Connecticut avenue toward Twenty-third street extended, the exact location of the pipe to be determined by the superintendent of the water department.

Ordered, That the assessor of the District of Columbia transmit to the Commissioners immediately upon the filing thereof, all applications hereafter received for liquor licenses for places of business to be located within the area of the city of Washington embraced by the east side of Eighth street NW., the west side of Thirteenth street NW., and the south side of P street northward, inclusive.

Ordered, That the grooved rail marked "approved by Commissioners Ross and Robert on the blue print filed with L. R. 172872, C. O., is hereby approved for use by the Capitol, North O Street and South Washington Railroad Company."

MARCH 25, 1891.

Ordered, That the major of police cause the force under his direction to visit all places where steam is generated to ascertain whether the certificate of the boiler inspector pertaining to such plant and the license of the engineer are mounted in frames and hung in some conspicuous place in or about the engine or boiler room, and are dated within the year, and promptly report delinquencies in that respect.

MARCH 26, 1891.

Ordered, That the plan of the Rock Creek Railway Company for the construction of its tracks on Eighteenth and U streets and Florida avenue is hereby approved.

MARCH 27, 1891.

Ordered, That permit be granted the building committee of the United Service Club to cut through the portion of sewer to be abandoned on the south side of I street adjacent to the north front of lot 21, square 186, where necessary for the construction of certain proposed vaults, provided that all broken sections are carefully closed with masonry and the pipe removed is hauled to the C street property yard without expense to the District.

APRIL 1, 1891.

Ordered, That the offer of the United States Electric Lighting Company to maintain thirty-six electric lights on Fourteenth street from H street to Florida avenue NW. from April 1 to June 30, 1891, for such sum as may remain available from the appropriation for the current year

is hereby accepted upon the distinct understanding and agreement that no claim shall be based thereon for any payment by means of deficiency legislation or otherwise, and that the sum paid per lamp per night shall in no instance exceed the rate prescribed by law.

APRIL 2, 1891.

Ordered, That section 2 of the order of March 21, 1891, amending the regulations for the examining and licensing of steam engineers in the District of Columbia, is hereby so amended as to provide that all steam engineers' licenses issued prior to April 30, 1890, shall expire so soon after April 30, 1891, as the board of steam engineers shall pass upon applications for the renewal of such licenses, and all licenses issued subsequent to April 30, 1890, shall expire one year from their respective dates, provided any failure after due notice to appear for reëxamination and to pay the requisite license fee will terminate the license of persons so notified.

APRIL 6, 1891.

Ordered, That, in accordance with its request, the Washington Gas-light Company is hereby granted permission to alter the location of its gas main and services along the line of the proposed cable road on Fourteenth street and Pennsylvania avenue, and to lay new mains where necessary, provided that locations of said mains are determined by consultation with the superintendent of the water department, and that no changes shall be made until such consultation is had and it is settled that the positions chosen for locating water mains along the proposed routes will not be interfered with.

Ordered, That, in pursuance with the opinion of the attorney of the District of Columbia, the assessor will regard as not applying to the granting of apothecaries' licenses the act of Congress of February 28, 1891, prohibiting the sale of intoxicating liquors at any place within 1 mile of the Soldiers' Home property in the District of Columbia.

Ordered, That the order of March 6, 1891 (L. S. 50038), is hereby amended as follows:

That hereafter every person excavating or grading for buildings and public works and hauling excavated material over any improved street or avenue shall deposit with the collector of taxes \$25 in each case as a guaranty that all deposits of material incident to such work shall be removed from streets, roads, and alleys, and any damage that may result from such deposit made good, or in case of failure to make such removals, that the District may do the necessary work therefor and pay the expense from the amount of such deposit. The certificate of the collector of taxes that such a deposit has been made must, before the issue of such permit, be filed with the officer issuing the permit for the excavation and be retained by said officer until notified by the officer in charge of the engineer department to return it.

APRIL 6, 1891.

All permits for sewer, water, or other house connections or repairs thereto shall hereafter be issued by the permit clerk of the engineer department.

As early as practicable each day the superintendent of the water department shall send to the permit clerk an accurate list of all excavations made on the preceding day under his direction in the streets, avenues, roads, and alleys.

APRIL 9, 1891.

Ordered, That Capt. W. T. Rossell, Capt. James L. Lusk, and the inspector of buildings are hereby constituted a committee to recommend to the Commissioners a code of regulations to govern the granting of permits to occupy portions of the public highways for vault purposes.

Ordered, That no permit or license shall be issued to locate or operate carousals or merry-go-rounds, unless the written consent thereto of all the owners and occupants of property within two squares of the proposed location in every direction shall have been filed with and approved by the Commissioners.

Ordered, That the roadway of Eleventh street NW., from Q street to Florida avenue, be widened to 50 feet, according to the plans and estimates of the engineer department, as per L. S. 173083 C. O.

APRIL 10, 1891.

Ordered, That the necessary changes be made in the location and arrangement of the water mains and the water-service pipe along the lines of the proposed cable road of the Washington and Georgetown Railroad Company consequent upon the construction of said roads, according to the plans and recommendations of the engineer department, upon deposit by the Washington and Georgetown Railroad Company of the total estimated cost of \$28,425.

APRIL 11, 1891.

Ordered, That four street railway tracks may be placed on Fourteenth street between New York avenue and H street NW. in the place of the three tracks now there. The width between the centers of the tracks to be 10 feet, or about 5 feet between the rails of the adjacent tracks, the work to be done at the risk and expense of the Washington and Georgetown Railroad Company, under the supervision of the engineer department.

APRIL 13, 1891.

Ordered, That the plans submitted by the Anacostia and Potomac River Railroad Company, for the construction of its tracks at Second and Canal and Second and M streets and at crossing of Pennsylvania Railroad on Virginia avenue and Second street SW., are hereby approved.

Ordered, That the parties now encroaching on Fifteenth street, between C and D streets SW., be required to remove their fences and other structures therefrom, and that the general dump be made in such a way as to raise the entire width of the streets to the proper grade and discontinued where the streets are above grade.

Official copy furnished major of police who will enforce the removals mentioned in the order.

APRIL 14, 1891.

Ordered, That the Washington and Georgetown Railroad Company be, and it is hereby, granted a permit to lay temporary tracks and to open the streets for the construction of its cable road on the Pennsylvania avenue and the Fourteenth street lines on the following conditions, viz:

All work shall be done at the risk and expense of the Washington and Georgetown Railroad Company, and said company shall be responsible for any accidents or damages caused by or due to any work that may be done by it or others in connection with the construction of the said road.

Said company shall, during the construction, keep open for travel all cross streets, so as to incommode the public as little as possible.

There shall not be open at any time more than ten squares, and this number may hereafter be reduced to six by the Commissioners of the District of Columbia, if deemed necessary by them, nor shall any place in the street be kept open more than sixty days.

Said company shall deposit with the collector of taxes the sum of \$1,000 to defray such expenses as may be incurred by the District of Columbia in connection with the inspection of the work and in making good all damages to any district work injured, and in restoring all pavements disturbed by changes made in connection with said work in sewers, water mains, and gas mains or other underground constructions in the streets, and to hereafter deposit such further sums for said purposes and at such time as the Commissioners of the District of Columbia may request, provided that when the work is finished such amount as shall not have been expended shall be returned to said company within ninety days, with statement of account in full.

Said railroad company shall restore, repair, and repave the streets and avenues along the lines of its road that may be cut, damaged, or injured by it in consequence of the reconstruction of its road, and put the same in first-class condition, to the satisfaction of the Commissioners, and shall also keep the same in good repair for a period of time, such as is usually required in contracts by the District for similar work; provided that if said company shall refuse or neglect to do said work or make such repairs, the District of Columbia may do the same and charge the expense thereof to the company.

There shall be employed by the District of Columbia and paid out of the deposit of said company an inspector at \$4 per diem for each working day, who shall carry out all orders that may be given him by the Commissioners or their agents, and shall also report to said Commissioners any cuts in the pavements of streets torn up for which said company is not responsible; provided, that said inspector shall not be employed until deemed necessary by the assistant to the Engineer Commissioner in charge of streets.

Whenever the grade of the tracks of the railroad shall not be on the

grades of the present paved streets all expenses of making the same conform with said grades shall be borne by said company.

All paving material and macadam taken out of the streets and not previously paid for by the said company shall be hauled to a District property yard or to such other place as the Commissioners may direct, provided that the haul be no greater than to the nearest District property yard, at the expense of said company.

All rights of the District to the materials taken out of the streets under this permit and not hauled to the District property yards, or not otherwise taken possession of by the said District, are hereby reserved for future consideration, and the District shall not be deemed estopped from asserting its rights thereto by the issuance of this permit, the District claiming said material so far as it shall not be used by said company in repaving its tracks with it at such points where like material is used in the pavements of that part of the street more than 2 feet beyond the exterior rails of said company's tracks, under the direction of the Commissioners.

The pavement placed on the part of the street for which the company is responsible shall be the same as the adjacent pavement.

Every precaution against accidents shall be taken, such as barricading the work and lighting the same at night, as provided by law, or the regulations of the Commissioners of the District of Columbia.

APRIL 15, 1891.

Ordered, The requisite proceedings having been taken, all the owners of square numbered 1008, in the city of Washington, in conformity to the act of Congress entitled "An act to authorize the changing of alleyways in the city of Washington," approved July 6, 1882, so much of the old alleyways in said square as the petitioners ask shall be closed is hereby closed as prayed for and as is indicated for that purpose on the plan hereto attached (L. R. 173, 467 C. O.), and the new alleyways proposed by the petitioners to be substituted therefor as indicated on said plan, are hereby declared open as public alleys.

APRIL 20, 1891.

Ordered, That the Potomac Electric Company be, and it is hereby, granted a permit to erect poles and string electric wires thereon from the Chain Bridge, in the District of Columbia, to Georgetown, provided that in so doing it does not trespass upon private property or property of the United States. The said Potomac Electric Company is also permitted to erect poles and string electric wires thereon in the following streets in Georgetown, viz:

Across Chain Bridge, along the Canal road to M street, to its intersection with Water street; thence along both M and Water streets to Rock Creek, and branching from Water street at High street; thence along High street to P street: thence along P street to Rock Creek.

Said wires shall be so insulated and adjusted as to protect life and limb in the safest possible manner.

The said Potomac Electric Company, before it shall proceed under this permit to erect poles in the streets in Georgetown, shall first get the consent of the adjoining lot owners upon any street or streets through which it may propose, with the consent of the Commissioners, to erect its wires.

The poles in the District and Georgetown to be of such material, dimensions, and style as the Commissioners shall approve, and they are to be erected at the risk and expense of the said Potomac Electric Company.

Further, that the streets and sidewalks in the city of Georgetown disturbed by the erection of such poles shall be repaired and restored to a like condition in which they were before such poles were erected at the cost and expense of the said the Potomac Electric Company, and this permit is issued on the further condition that it is not transferable except by the written permission of the Commissioners, and the said The Potomac Electric Company shall deposit with the collector of taxes such sum of money as the Commissioners may deem necessary to insure the restoration of the streets to the condition in which they were before they shall have been disturbed for the purpose of erecting poles hereunder for electrical purposes.

APRIL 24, 1891.

Ordered, That to give effect to the act of March 2, 1891, entitled "An act dedicating part of lots 14 and 15 in square 812 as a public alley," the surveyor of the District of Columbia is hereby directed to stake out the alley and furnish plat thereof in order that notice may be given the inspector of buildings and the owners of the property affected to remove obstructions from the line of the alley.

Ordered, That the Commissioners hereby approve of the acquisition by the Baltimore and Potomac Railroad Company, for the purposes of the business of said company, pursuant to the provisions contained in the act of Congress approved January 19, 1891, entitled "An act supplementary to an act entitled 'An act to authorize the construction of the Baltimore and Potomac Railroad in the District of Columbia,'" of squares 267, 268, 537, and all north 583, excepting the property therein owned by the United States.

APRIL 25, 1891.

Ordered, That the Board of Commissioners District of Columbia will hereafter hold sessions daily, except Saturday, from 10 to 11 o'clock a. m.

Ordered, The Postal Telegraph Cable Company is hereby authorized to connect their conduit in front of 1423 F street NW. with the building No. 1424 F street NW. by a 6-inch terra-cotta pipe laid in the north footway upon a bed of hydraulic concrete not less than 3 inches in thickness.

The work must be done under the regulations of the engineer department of the District of Columbia, to be commenced within five days and completed within five days thereafter.

No overhead wire is to be strung or pole erected in connection with this work, which shall be done at the risk and expense of the said company, and all pavements disturbed shall be relaid at the expense of said company.

MAY 2, 1891.

Ordered, That the order of March 6, 1891, section 7, as amended by the order of April 8, 1891, section 7, respecting the removal from the public highways of the District of excavated material, is hereby further amended, to the effect that all parties subject to the provisions of said order, as so modified, who shall have deposited \$50 with the collector of taxes for the purpose of said order, shall not be required to make any further deposit when taking out permits for excavations until their total deposit is reduced to less than \$25.

MAY 4, 1891.

Ordered, That the following regulation is hereby made under section 7 of the act approved March 3, 1891, entitled "An act relating to junk dealers, dealers in second-hand personal property, and pawnbrokers in the District of Columbia."

For storing or taking care to prevent injury during disuse on blankets, clothing, carpets, furs, rugs, dress-goods, cloths, mirrors, oil paintings, glass and china ware, pianos, organs, curtains, bedding, and upholstered furniture, pawnbrokers shall be allowed to charge 2 per cent per month, in addition to the regular charges, for the first three months or part thereof such goods shall remain as pledge for money advanced.

MAY 6, 1891.

Ordered, That to render more effectual in abating and preventing the extension of a nuisance injurious to the public health, the order of April 29, 1891, revoking the permit given June 19, 1884, No. 1216, Volume A, 1884, engineer department, District of Columbia, to lay a 6-inch tile pipe from John Guethler's "brewery in square 1,042 down Fourteenth street to K street SE. and down said K street to ravine," the said pipe shall be so cut as to be useless as a drain, and the health officer will require owners of property connected with said pipe to provide their said premises with dry closets.

MAY 8, 1891.

Ordered, That the Anacostia and Potomac River Railroad Company be, and it is hereby, granted a permit to open M street from South Capitol street to Water street, for the purpose of relaying tracks, under the following conditions, viz:

All work shall be done at the risk and expense of the Anacostia and Potomac River Railroad Company, and the said company shall be responsible for any accidents or damages caused by or due to any work that may be done by it or others in connection with the construction of said road.

Said company shall, during the construction, keep open for travel all cross streets, so as to incommode the public as little as possible.

There shall not be open at any time more than 4 squares, nor shall any place in the street be kept open more than thirty days.

Said company shall deposit with the collector of taxes the sum of \$100 to defray such expenses as may be incurred by the District of Columbia in connection with the inspection of the work, and in making good all damages to any District work injured, and in restoring all pavements

disturbed by changes made in connection with said work in sewers, water mains, and gas mains, or other underground constructions in the streets, and to hereafter deposit such further sums for said purpose and at such times as the Commissioners of the District of Columbia shall request: *Provided*, That when the work is finished such amount as shall not have been expended shall be returned to said company within ninety days, with a statement of account in full.

Said company shall restore, repair, and repave the streets and avenues along the lines of its road that may be cut, damaged, or injured by it in consequence of the relaying of its tracks, and put the same in first-class condition, to the satisfaction of the Commissioners; and shall also keep the same in good repair for a period of time such as is usually required in contracts for the District for similar work: *Provided*, That if said company shall refuse or neglect to do said work or make such repairs, the District of Columbia may do the same and charge the expenses thereof to the company.

There shall be employed by the District of Columbia, and paid out of the deposit of the said company, an inspector, with compensation at the rate of \$4 per diem for each working day, who shall carry out all orders that may be given him by the Commissioners, or their agents, and shall also report to said Commissioners any cuts of the pavements of the streets torn up for which the company is not responsible: *Provided*, That said inspector shall not be employed until deemed necessary by the assistant to the Engineer Commissioner in charge of streets.

Whenever the grade of the tracks of the railroad shall not be on the grades of the present paved streets, all expenses of making the same conform with said grades shall be borne by said company.

All paving material and macadam taken out of the streets and not previously paid for by the said company shall be hauled to a District property yard, or to such other place as the Commissioners may direct: *Provided*, That the haul shall be no greater than to the nearest District property yard, at the expense of the said company.

All rights of the District to the materials taken out of the streets under this permit and not hauled to the District property yards, or not otherwise taken possession of by the said District, are hereby reserved for future consideration; and the District shall not be deemed estopped from asserting its rights thereto by the issuance of this permit, the District claiming said material so far as it shall not be used by said company in repaving its tracks with it at such points where like material is used in the pavements of that part of the street more than 2 feet beyond the exterior rails of said company's tracks under the direction of the Commissioners.

The pavements placed on the part of the street for which the company is responsible shall be the same as the adjacent pavement.

Every precaution against accidents shall be taken, such as barricading the work and lighting the same at night, as provided by law or the regulations of the Commissioners of the District of Columbia.

Ordered, That in pursuance of the recommendation of Lieut. Col. George H. Elliot, in charge of the Washington Aqueduct, the Commissioners hereby, on behalf of the government of the District of Columbia, assume the responsibility for the care and repair of water-main valves of the second class and their casings, as per list furnished by said officer in charge of the Washington Aqueduct.

MAY 9, 1891.

MAY 15, 1891.

Ordered, That the major of police is hereby directed to prevent any further deposit by the Washington and Georgetown Railroad Company of rails on Pennsylvania avenue, between First street west and Twenty-second street west, and Fourteenth street west, between New York avenue and Florida avenue, until further orders.

MAY 20, 1891.

Ordered, That the alanthus tree is hereby condemned for use on the streets of the District of Columbia, and that the parking commission is requested to remove such of these trees as are now in use as rapidly as the public necessities require.

MAY 23, 1891.

On application to the Commissioners by residents of the District outside the limits of Washington and Georgetown for the opening of T street north, between Lincoln avenue and First street west, and after notice of such extension by advertisement twice a week for three successive weeks, it is

Ordered, That said extension be made according to the plat on file in this office, and the marshal of the United States for the District of Columbia is hereby requested and directed to summon a jury of seven judicious, disinterested men, not related to any party in interest, to be and appear on the premises on a day to be fixed by said marshal, to assess the damages, if any, which the owner or owners of land through which said street is proposed to be extended and laid out, as shown on said plat, may sustain by reason thereof.

MAY 25, 1891.

Ordered, That the Washington and Georgetown Railroad Company be required to remove all iron rails which are deposited along the curb lines of Pennsylvania avenue, between First street and Twentieth street NW., by the 1st day of June, 1891.

MAY 27, 1891.

Ordered, That T street, from Lincoln avenue to Second street NE, in the county of Washington, District of Columbia, be, and the same is hereby, declared a public road and opened as such.

Ordered, That the verdict rendered December 30, 1890, by the jury summoned by the United States marshal in and for the District of Columbia, as to the damages sustained by said opening of said highway in the cases of Mary M. Evans, Thomas Geary, and John Montgomery, is hereby ordered to be recorded in the offices of the recorder of deeds and the surveyor for the District of Columbia.

MAY 28, 1891.

Ordered, That section 3 of article 8 of the police regulations in and for the District of Columbia is hereby amended by adding thereto the following:

That street railroad companies of the District of Columbia will not be hereafter permitted to deposit upon any highway of the District any material to be used in the construction, alteration, repair, or removal of tracks or pavements unless specially authorized in each instance by the Commissioners so to do.

MAY 29, 1891.

Ordered, That the Anacostia and Potomac River Railroad Company is hereby directed to pave with granite blocks the approaches to the Navy-yard Bridge across the Eastern Branch, and that in the event of the failure of said company promptly to do so, the work shall be done by the engineer department immediately after July 1, 1891, and liens issued against said road for the cost of such work.

MAY 29, 1891.

Ordered, That the Commissioners hereby approve of the acquisition by the Baltimore and Potomac Railroad Company for the purposes of the business of said company, pursuant to the provisions contained in the act of Congress approved January 19, 1891, entitled, "An act supplementary to an act entitled, 'An act to authorize the construction of the Baltimore and Potomac Railroad Company in the District of Columbia,'" of square 298, in the city of Washington, excepting the property therein owned by the United States.

JUNE 1, 1891.

Ordered, That permit be granted the United States Electric Lighting Company to connect with its underground conduit premises 1620 Fourteenth street NW.; to connect conduit southwest corner of Fourteenth and U streets with cable pole in block 237; to connect conduit northwest corner of Fourteenth and H streets with cable pole in block 250; to connect manhole northeast corner Pennsylvania avenue and Twenty-second street with manhole southeast corner Twenty-second and K streets NW.

Ordered, That hereafter each of the Commissioners will individually give personal hearings upon matters pertaining to the departments under his special supervision only between the hours of 10 and 12 o'clock a. m. on each secular day; that the regular meetings of the Commissioners, sitting as a board, shall be held on each secular day between 12 o'clock noon and 1 o'clock p. m.

JUNE 6, 1891.

In view of the many complaints with regard to the saloons in Louse alley and vicinity the Commissioners have decided to prohibit the sale of intoxicating liquors in that neighborhood, and it is hereby

Ordered, That a notice be served upon all dealers interested, that no application for licenses for that locality will be entertained or approved by them in future.

JUNE 18, 1891.

Ordered, That the permit granted March 3, 1891, to the Chesapeake and Potomac Telephone Company to lay not to exceed 5 miles of conduit, is hereby modified so as to read as follows:

From Thirteenth and D streets NW., north along Thirteenth street to E street, thence west along E street to Fourteenth street and E street NW.

This route to be followed instead of the route specified in the said permit, from Thirteenth and D streets, west along D street to Fourteenth and D streets NW., and thence along Fourteenth street to Fourteenth and E streets NW.

JUNE 23, 1891.

Ordered, That the regulations for the sale of intoxicating liquors are hereby amended by adding to section 1 thereof, the following:

That no application for wholesale liquor license shall hereafter be received unless accompanied by a certificate of the collector of taxes that the applicant has deposited the legal license fee therefor.

That there shall be printed upon the face of each wholesale and retail liquor license, and upon the retained copy, and be signed by each licensee before the issue of such license, the following:

This license is granted and accepted subject to these conditions: That for any sale of liquor on Sunday; that for any sale of liquor to any minor; that for keeping open between the hours of 12 o'clock midnight and 4 o'clock a. m.; that for having any entrance to the premises except from the street upon which the required number of signers has been obtained and for any other violation of the license laws or license regulations, this license shall be revoked by the Commissioners of the District of Columbia.

Ordered, That the hay scales on Prospect street, between Thirty-second and Thirty-third streets, in the city of Georgetown, shall be removed to the space south of the market house on M street in said city, and that the streets on the sides of the market house, leading to said space, be repaired out of the appropriation for current work of repairs of streets, etc.

JUNE 24, 1891.

Ordered, That the Anacostia and Potomac River Railroad Company be and it is hereby granted a permit to open Second street from M to Canal streets SW., for the purpose of relaying tracks under the following conditions, viz:

All work shall be done at the risk and expense of the Anacostia and Potomac River Railroad Company, and the said company shall be responsible for any accidents or damages caused by or due to any work that may be done by it or others in connection with the construction of said road.

Said company shall, during the construction, keep open for travel all cross streets, so as to incommode the public as little as possible.

There shall not be open at any time more than four squares nor shall any place in the street be kept open more than thirty days.

Said company shall deposit with the collector of taxes the sum of \$100 to defray such expenses as may be incurred by the District of Columbia in connection with the inspection of the work, and in making

good all damages to any District work injured, and in restoring all pavements disturbed by changes made in connection with said work in sewers, water mains, and gas mains or other underground constructions in the streets, and do hereafter deposit such further sums for said purposes and at such times as the Commissioners of the District of Columbia shall request: *Provided*, That when the work is finished such amount as shall not have been expended shall be returned to said company within ninety days, with a statement of account in full.

Said company shall restore, repair, and repave the streets and avenues along the lines of its road that may be cut, damaged or injured by it in consequence of the relaying of its tracks and put the same in first-class condition to the satisfaction of the commissioners, and shall also keep the same in good repair for a period of time such as is usually required in contracts by the District for similar work: *Provided*, That if said company shall refuse to do or neglect to do said work or make such repairs the District of Columbia may do the same and charge the expense thereof to the company.

There shall be employed by the District of Columbia, and paid out of the deposit of said company, an inspector with compensation at the rate of \$4 per diem for each working day, who shall carry out all orders that may be given him by the Commissioners, or their agents, and shall also report to said Commissioners any cuts in the pavements of the streets torn up for which the company is not responsible: *Provided*, That said inspector shall not be employed until deemed necessary by the assistant to the engineer Commissioner in charge of streets.

Whenever the grade of the tracks of the railroad shall not be on the grades of the present paved streets all expenses of making the same conform with said grades, shall be borne by the company.

All paving material and macadam taken out of the streets and not previously paid for by said company shall be hauled to the District property yard or to such other place as the Commissioners may direct: *Provided*, That the haul shall be no greater than to the nearest District property yard, at the expense of the said company.

All rights of the District to the materials taken out of the streets under this permit and not hauled to the District property yards or not otherwise taken possession of by the said District are hereby reserved for future consideration, and the District shall not be deemed estopped from asserting its rights thereto by the issuance of this permit, the District claiming said material so far as it shall not be used by said company in repaving its tracks with it at such points where like material is used in the pavements of that part of the street more than 2 feet beyond the exterior rails of said company's tracks, under the direction of the Commissioners.

The pavements placed on the part of the street for which the company is responsible shall be the same as the adjacent pavement.

Every precaution against accidents shall be taken, such as barricading the work and lighting the same at night, as provided by law or the regulations of the Commissioners of the District of Columbia.

JUNE 25, 1891.

Ordered, That inspectors and other employés of the sewer division are strictly forbidden to solicit or accept from any person having a contract with the District any money, present, or gratuity of any kind under any pretext whatever. This prohibition is intended to apply to large and small sums of money, and to loans and wagers.

That no employé of the sewer division shall drink or be under the influence of intoxicating liquor while on duty, and no foreman in charge of any District sewer work shall permit any intoxicating liquor to be kept or drunk upon any sewer work of which he is in charge.

No inspector on sewer work shall act as foreman, timekeeper, or receiver of materials for any contractor.

The general inspector of sewers shall submit a daily report showing all work visited, giving names of inspectors and foreman, and condition and progress of each work, and in addition everything that may be of interest concerning any particular piece of work. He shall submit with this report a certificate as to whether the work for the day concerned has or has not been done as required by the specifications. This report shall be addressed to the assistant to the Engineer Commissioner in charge of sewers.

JUNE 27, 1891.

Ordered, That the Rock Creek Railway Company be, and it is hereby, granted a permit to open U street, from Eighteenth to Fourteenth streets NW., and Boundary from Eighteenth street to Connecticut avenue, for the purpose of laying tracks under the following conditions, viz:

All work shall be done at the risk and expense of the Rock Creek Railway Company, and the said company shall be responsible for any accidents or damages caused by or due to any work that may be done by it or others in connection with the construction of said road.

Said company shall, during the construction, keep open for travel all cross streets, so as to incommode the public as little as possible.

There shall not be open at any time more than four squares, nor shall any place in the street be kept open more than thirty days.

Said company shall deposit with the collector of taxes the sum of \$100 to defray such expenses as may be incurred by the District of Columbia in connection with the inspection of the work, and in making good all damages to any district work injured and in restoring all pavements disturbed by changes made in connection with said work in sewers, water mains, and gas mains or other underground constructions in the streets, and do hereafter deposit such further sums for said purposes and at such times as the Commissioners of the District of Columbia shall request: *Provided*, That when the work is finished such amount as shall not have been expended shall be returned to said company within ninety days, with a statement of account in full.

Said company shall restore, repair, and repave the streets and avenues along the lines of its road that may be cut, damaged, or injured by it in consequence of the relaying of its tracks, and put the same in first-class condition, to the satisfaction of the Commissioners; and shall also keep the same in good repair for a period of time such as is usually required in contracts by the District for similar work: *Provided*, That said company shall refuse to do or neglect to do said work or make such repairs, the District of Columbia may do the same and charge the expense thereof to the company.

There shall be employed by the District of Columbia, and paid out of the deposit of said company, an inspector, with compensation at the rate of \$4 per diem for each working day, who shall carry out all orders that may be given him by the Commissioners or their agents, and shall also report to said Commissioners any cuts in the pavements of the streets torn up for which the company is not responsible: *Provided*,

That said inspector shall not be employed until deemed necessary by the assistant to the Engineer Commissioner in charge of streets.

Whenever the grade of the tracks of the railroad shall not be on the grades of the present paved streets, all expenses of making the same conform with said grades shall be borne by the company.

All paving material and macadam taken out of the streets and not previously paid for by said company shall be hauled to the District property yard, or to any other place, as the Commissioners may direct: *Provided*, That the haul shall be no greater than to the nearest District property yard, at the expense of the said company.

All rights of the District to the materials taken out of the streets under this permit and not hauled to the District property yards or not otherwise taken possession of by the said District, are hereby reserved for future consideration; and the District shall not be deemed estopped from asserting its rights thereto by the issuance of this permit, the District claiming said material so far as it shall not be used by said company in repaving its tracks with it at such points where like material is used in the pavements of that part of the street more than 2 feet beyond the exterior rails of said company's tracks, under the direction of the Commissioners.

The pavements placed on the part of the street for which the company is responsible shall be the same as the adjacent pavement.

Every precaution against accidents shall be taken, such as barricading the work and lighting the same by night as provided by law, or the regulations of the Commissioners of the District of Columbia.

V.

REPORT OF THE OPERATIONS OF THE ENGINEER DEPARTMENT.

A.—REPORT OF CAPT. W. T. ROSSELL, CORPS OF ENGINEERS, U. S. A., ASSISTANT TO THE ENGINEER COMMISSIONER OF THE DISTRICT OF COLUMBIA.

WASHINGTON, D. C., November 30, 1891.

SIR: I have the honor to submit the following report of the operations of that portion of the engineer department under my supervision for the fiscal year 1890-'91.

STREET IMPROVEMENTS.

Under this head is included all work done on streets and avenues of the cities of Washington and Georgetown under the appropriation bill. It does not include any repair work nor work done under the permit system.

The appropriations expended during this fiscal year were distributed as follows:

Schedule.	Amount.	Per cent.
Georgetown.....	\$60,000	9.2
Northwest.....	259,000	39.7
Southwest.....	75,000	11.5
Southeast.....	121,500	18.6
Northeast.....	136,700	21.0
Total	652,200	100.0

The character and extent of street pavements on July 1, 1891, are shown in the following table, both for city and county:

SUMMARY.

Carriageway.	Length (feet).	Square yards.	Miles.
Sheet asphalt	262,570	1,087,858	49.7
Coal tar	201,640	881,939	38.2
Asphalt block	53,410	242,736	10.1
Granite block	129,621	609,687	24.5
Cobble and blue rock	57,302	440,754	10.8
Macadam	34,902	293,218	10.4
Gravel	138,675	530,188	20.2
Total improved	898,120	4,086,380	169.9
Unimproved	349,473	1,167,672	65.6
Grand total	1,247,593	5,254,052	235.5

Suburban (laid since 1888).

	Sq. yards
Asphalt.....	65.87
Granite block.....	16.99
Macadam.....	41.89
Gravel.....	74.54
Total	199.30

A map showing the above pavements in detail is herewith appended:
The pavements laid during the past year were granite block, asphalt on bituminous base and on hydraulic base, and asphalt block.

The specifications for these various kinds of pavements will be found in the appendices to this report. A comparison of these specifications will show that the standard asphalt pavement on hydraulic base has been left out. This was the pavement adopted some years ago, and experience has demonstrated that the pavement now called for by the specifications is a better one.

The law this year permitted the use of the hydraulic base for sheet asphalt pavement at a cost not to exceed \$2.25 per square yard. I do not think that in the future any asphalt pavement should be laid without this, except under the most favorable conditions.

Whenever streets paved with cobble were to be paved with sheet asphalt the cobble was left as a foundation, if it was in good condition. This resulted in a saving of from 10 to 50 cents per square yard.

On I street NW., between Twentieth and Twenty-third streets, paved this year with asphalt, was a most excellent bed of macadam. This macadam was left for a base and, apparently, with good results.

GRADING AND REGULATING.

No change has been made in this work during the fiscal year. In the new work now being done the Telford-Macadam pavement has been substituted for the macadam formerly used.

The nature, distribution, and cost of the various improvements made from the appropriation for street improvements during the year are shown in the following table:

GEORGETOWN SCHEDULE.

Date.	No. of con-tract.	Contractor.	Locality.	Square yards.	Price, square yard.	Contract work.	Material.	Total cost.	Character of pavement.
1890. Sept. 15	1317	The Barber Asphalt Paving Co.	35th st. from U to Tennallytown road.	6,009.13	\$2.25	\$17,013.79	\$1,227.90	\$18,241.69	Asphalt on hydraulic base.
Sept. 15	1317	do	34th st. from P to R.	2,264.05	2.00	6,792.82	1,701.08	8,493.90	Asphalt on bituminous base.
Sept. 15	1317	do	Q st. from 28th to 29th.	859.85	2.00	2,156.60	171.29	2,327.89	Do.
Sept. 15	1317	do	Q st. from 35th to High.	4,001.98	2.00	11,618.92	2,517.09	14,136.01	Do.
Sept. 16	1328	John Dugan	34th st. from R to High.	4,892.14	.3692	5,180.88	4,774.63	8,953.88	Macadam; \$407.67 deducted for stone furnished, and \$563.96 for deficiency in macadam roadway; total, \$971.63.
				18,027.15	.....	42,763.01	10,391.99	52,183.37	

NORTHWEST SCHEDULE.

1890. Sept. 15	1316	The Barber Asphalt Paving Co.	I st., from 20th to 23d st.	6,295.58	1.20	13,988.62	3,203.52	17,192.14	Asphalt on Macadam base.
Sept. 15	1316	do	23d, from I to Pennsylvania ave.	1,424.79	1.20	3,171.99	175.22	3,347.21	Asphalt on cobblestone base.
Sept. 15	1316	do	P st., from 4th to North Capitol.	7,134.71	2.00	19,142.63	4,852.68	23,995.31	Asphalt on bituminous base.
Sept. 15	1317	do	Boundary, from 4th st. to New Jersey ave.	3,153.81	2.00	8,410.28	631.19	9,041.47	Do.
Sept. 15	1318	do	11th, O to Boundary street	8,733.77	2.25	30,263.08	6,855.19	37,118.27	Asphalt on hydraulic base.
Sept. 17	1329	The Cranford Paving Co.	New York ave., from New Jersey ave. to North Capitol.	5,603.60	2.00	14,435.32	604.30	15,039.62	Asphalt on bituminous base.
Sept. 17	1329	do	New Hampshire ave., T to V street.	6,805.01	2.00	18,936.46	3,136.91	22,073.37	Do.
Sept. 17	1329	do	R st., from 7th to Boundary	7,551.28	2.25	23,875.28	5,837.14	29,712.92	Asphalt on hydraulic base.
Sept. 17	1329	do	R st., from 16th to New Hampshire ave.	3,918.20	2.00	12,222.87	2,649.87	14,872.74	Asphalt on bituminous base.
Sept. 17	1329	do	12th, V to Boundary st	3,553.67	2.25	10,465.31	2,076.63	12,541.94	Asphalt on hydraulic base.
Sept. 17	1329	do	25th, Pennsylvania ave. to K street.	1,163.37	2.00	3,402.60	743.62	4,146.22	Asphalt on bituminous base.
Sept. 15	1319	Andrew Gleeson	4th, New Jersey ave. to Boundary st	2,400.52	.79	3,092.31	4,839.38	7,931.69	Granite block.
Sept. 15	1319	do	B st., from 6th to 7th.	1,675.03	.77	2,546.60	4,105.15	6,651.65	Do.
Sept. 17	1330	The Cranford Paving Co.	4th, New Jersey ave. to Boundary	4,594.02	2.25	12,696.84	840.94	13,537.78	Asphalt on hydraulic base.
Sept. 17	1330	do	U st., 9th to 10th st	2,301.11	2.25	7,056.29	1,399.65	8,455.94	Do.
1891. June 15	1471	do	18th st., from New Hampshire ave. to S st.	3,129.91	2.25	8,786.36	2,000.31	10,785.67	Do.
				69,438.48	.....	192,493.24	43,960.70	236,453.94	

SOUTHWEST SCHEDULE.

Date.	No. of contract.	Contractor.	Locality.	Square yards.	Price, square yard.	Contract work.	Material.	Total cost.	Character of pavement.
1890. Oct. 6	1361	W. H. Mohler	Delaware ave., C to G	4,727.17	\$0.91	\$6,873.58	\$3,314.94	\$10,188.52	Macadam.
Sept. 13	1319	Andrew Gleason	M st., from 6th to Water	757.16	.77	1,096.54	1,666.47	2,763.01	Granite blocks.
Sept. 15	1321	W. H. Mohler	G, from $\frac{1}{2}$ to South Capitol						Do.
Sept. 15	1321	do	G, from $\frac{1}{2}$ to 3d st.	6,516.95	.77	5,653.98	13,035.87	18,689.85	
Sept. 17	1330	The Cranford Paving Co	D st., from 1st to 3d sts.	2,578.49	2.25	8,539.51	2,191.83	10,731.34	Asphalt on hydraulic base.
Sept. 17	1330	do	E st., from South Capitol to 1st	3,104.11	2.00	7,058.70		7,058.70	Asphalt on bituminous base.
Sept. 15	1316	The Barber Asphalt Paving Co.	8th st., from B to C	1,434.14	1.20	3,054.10	104.30	3,158.40	Asphalt on rubble base.
				19,118.02		32,276.41	20,313.41	52,589.82	

SOUTHEAST SCHEDULE.

Date.	No. of contract.	Contractor.	Locality.	Square yards.	Price, square yard.	Contract work.	Material.	Total cost.	Character of pavement.
1890. Sept. 15	1322	W. H. Mohler	10th, East Capitol to Pennsylvania ave.	4,728.26	0.93	7,276.60	808.37	8,084.97	Macadam.
Sept. 15	1322	do	2d, D to G	2,099.43	.93	4,256.00	579.14	4,835.14	Do.
Sept. 15	1324	P. Maloney	G st., from 11th to Pennsylvania ave	1,730.24	2.00	5,547.13	2,537.42	8,084.55	Asphalt blocks.
Sept. 15	1324	do	B, 11th to North Carolina ave.	4,577.53	2.00	12,908.09	2,567.13	15,475.22	Do.
Sept. 15	1325	do	North Carolina ave., 6th to 8th st	6,377.84	2.00	14,538.28	2,176.42	16,714.70	Do.
Sept. 15	1325	do	C (N. S.), 4th to 6th st	1,462.64	2.00	3,440.62	58.87	3,499.49	Do.
Sept. 15	1325	do	C (S. S.), 4th to 6th st	1,613.50	2.00	3,743.65	70.39	3,814.05	Do.
Sept. 15	1325	do	South Carolina ave., 6th to 7th st.	3,287.74	2.00	7,746.17		9,214.01	
Sept. 15	1361	W. H. Mohler	I st., from 3d to 8th	4,249.49	.93	6,061.02	1,467.84	6,795.94	Macadam.
Oct. 6	1361	do	7th st., from Virginia ave. to M st	1,785.25	.93	2,960.77	734.92	3,511.48	Do.
Sept. 15	1326	E. E. Barnes	B st., from 11th to 19th st	12,004.36	.75	18,183.94	550.71	19,882.74	Macadam; \$248 deducted for inspectors.
				43,917.28		86,662.28	13,498.01	99,912.29	

NORTHEAST SCHEDULE.

1890. Sept. 15	1316	The Barber Asphalt Paving Co.	9th st., from H to Maryland ave.	5,781.15	2.00	14,895.72	3,066.76	17,962.48	Asphalt on bituminous base.
Sept. 15	1320	Andrew Gleason	8th st., from I to K	1,310.93	.96	1,781.18	184.33	1,780.57	Macadam; \$184.94 deducted for deficiency in Macadam road-way.
Sept. 15	1320	do	12th st., from Maryland ave. to H	3,321.56	.96	4,450.26	736.11	4,342.14	Macadam; \$844.23 deducted for deficiency in Macadam road-way.
Sept. 15	1320	do	G st., from 6th to 7th	1,767.60	.96	2,794.27	417.20	2,779.30	Macadam; \$432.17 deducted for deficiency in Macadam road-way.
Sept. 15	1324	P. Maloney	Maryland ave., from 13th to Boundary.	9,635.10	2.00	21,694.86	3,144.97	24,839.83	Asphalt blocks.
Sept. 15	1325	do	9th st., from Massachusetts ave. to Maryland ave.	6,711.88	2.00	17,298.64	4,290.62	21,589.26	Do.
Sept. 15	1325	do	8th st., from Maryland ave. to B.	5,855.97	2.00	13,195.84	2,449.54	15,645.38	Do.
Sept. 17	1331	The Cranford Paving Co ..	1st st., from C to F	5,616.24	2.00	13,766.00	229.46	13,995.46	Asphalt on bituminous base.
Sept. 17	1331	do	2d st., from F to H	3,884.92	2.00	9,513.88	81.35	9,595.23	Do.
1891. June 3	1465	P. Maloney	4th st., from C to D	836.92	2.00	1,957.20	14.72	1,971.92	Asphalt blocks.
				44,722.27	.....	101,347.85	14,615.06	114,501.57	

APPROPRIATION 1891-'92.

The following is a list of the streets and avenues in the cities of Washington and Georgetown for the improvement of which money was appropriated:

FIRST.

Street.	From—	To—	Character of improvement.
New York avenue NE...	North Capitol	Florida avenue	Asphalt pavement.
D, NW	Seventeenth	Eighteenth	Do.
Eighteenth NW	D	E	Do.
New York avenue, NW ..	Thirteenth	Fourteenth	Remove parking and pave with asphalt.
Tenth, NW	S	T	Asphalt pavement.
Riggs street, NW	Sixteenth	Seventeenth	Do.
North Capitol	K	M	Do.
Second, SW	Maryland avenue ..	C and E to F	Do.

SECOND.

Eighteenth NW	New Hampshire avenue.	S	Asphalt pavement.
Thirteenth NW	T	Florida avenue	Do.
U	Fourteenth	Sixteenth	Do.
Fourth NE	C	D	Asphalt block pavement.
Thirteenth SE	D	Pennsylvania avenue ..	Grade and regulate.
Prospect	Thirty-third	Thirty-second	Asphalt pavement.
R	New Hampshire avenue.	Twentieth	Do.
T	Ninth	Tenth	Asphalt pavement.
Sixth NE	C	D	Asphalt block pavement.
Florida avenue NE	Bladensburg road ..	Ninth	Grade and regulate.
Thirty-sixth	Prospect	O	Do.
N	Twenty-second	Twenty-fourth	Asphalt pavement.
Caroline	Fifteenth	Sixteenth	Do.
Third NE	F	H	Do.
Florida avenue NW	First	Fourth	Grade and regulate.

THIRD.

Massachusetts avenue NE.	North Capitol	First	Asphalt pavement.
M SW	Four-and-a-half	Sixth	Granite block pavement.
Tenth SE	D	Pennsylvania avenue ..	Asphalt block pavement.
Pennsylvania avenue ..	Eleventh	Bridge	Sidewalk and parking.
Eleventh SE	East Capitol	C	Asphalt block pavement.
C NE	Eighth	Tenth	Do.
E SW	Seventh	Thirteenth	Asphalt pavement.
D (n. s.) SE	Ninth	Pennsylvania avenue ..	Asphalt block pavement.
North Carolina avenue SE.	Eighth	Eleventh	Do.
Prospect	Thirty-fifth	Thirty-sixth	Asphalt pavement.
North side of Lincoln Square.			Grade and regulate.
I SE	Second	Third	Do.
Second SE	I	Virginia avenue	Do.
N NW	Thirty-fifth	Thirty-sixth	Asphalt pavement.

Contracts have been made for all these streets except Eighteenth street NW, from New Hampshire avenue to S; Fourth NE, C to D, and Sixth NE, C to D. These streets were provided for in the appropriations for 1890-'91, and contracts made during that year, and it having been found that there was sufficient money in that appropriation to allow this expenditure, they were improved and paid for out of the appropriation for 1891.

PERMIT WORK.

Appropriation 1890-'91 allotted to surface department	\$130,000.00
Expended	141,198.77
Repayments during the year	20,588.26
Appropriation, 1891-'92	165,000.00
Estimate for 1892-'93	165,000.00

According to law repayments are available for other work done during the year.

In the street department the following is the summary of expenditures:

Regular permit work	\$31,984.01
Compulsory permit work	109,214.75

The following exhibits a summary of the work done. The details of each piece of work are on file in the office of the superintendent of streets and will also be found in his report for the present fiscal year:

UNDER THE PERMIT SYSTEM.

Total expended	\$31,984.02
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Summarized as follows:

Brick pavement laid	square yards..	10,307
Vitrified brick pavement laid	do	738
Asphalt block pavement laid	do	1,015
Asphalt tile pavement laid	do	1,416
Cobble pavement laid	do	1,677
Sheet asphalt pavement laid	do	1,075
Granolithic pavement laid	do	4,478
Curb set	linear feet..	6,790
Flag laid	do	680
Grading	cubic yards..	7,716

UNDER THE COMPULSORY PERMIT SYSTEM.

Total expended	\$109,214.75—
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Summarized as follows:

Brick pavement laid	square yards..	35,534
Vitrified brick pavement laid	do	5,312
Granite block pavement laid	do	22
Asphalt block pavement laid	do	24,929
Asphalt tile pavement laid	do	1,069
Cobble and rubble pavement laid	do	3,197
Granolithic (Schillinger) pavement laid	do	28
Curb set	linear feet..	3,848
Grading	cubic yards..	11,263

The amount of the appropriation for 1891-'92 is \$165,000. This is for sewers, sidewalks, and alleys, and the Commissioners have divided the amount, giving to sewers \$35,000 and to sidewalks and alleys \$130,000. The expenditure is coupled with the condition that one-half the cost of all work shall be charged to the abutting property, whether the work is done at the request of the property owners or by order of the Commissioners as necessary to the public health, safety, or comfort. All this money and much more could be expended in this way. I regard this as one of the most important funds given to the Commissioners for expenditure. Not only does it affect the public health in the case of alleys, but it permits a better class of sidewalks and new sidewalks to be laid where without such a fund the Commissioners would be powerless to require new sidewalks to be put down.

During the present fiscal year the appropriation for permit work to be used on roadways and for curbing of the same was \$50,000. As the appropriation is coupled with a provision requiring the amount to be done in any case to be not less than one square and to the full width of the roadway, it will be seen that this is only applicable to the places where the property is in the hands of large owners. Should this appropriation be made in such a way as to permit the Commissioners to expend the money by doing all work where necessary and taxing the abutting property for the amount, I believe that the same could be advantageously increased and wisely expended. Of course the objection would arise to this method that where streets are specially provided for the property owner is put only to the expense of the curbing and sidewalk, and where it is done under this system he is required to pay one-half of the entire cost of road way and side walk. In every case, then, where the parties are required to pay one-half they feel aggrieved and that they have just cause for complaint. To avoid this, as far as possible, it might be well to provide that such work should only be done on a written application signed by the owners of a majority of the property affected. This would enable the property owners to get such work done at any early date when they were willing to pay half the expense.

The following work was done under the appropriation for paving and curbing roadways:

	Asphalt.	Amount.
	Yards.	
R street extended, from Baltimore and Ohio Railroad to Brentwood road	2,321	\$6,993.53
Fourth street extended, from Baltimore and Ohio Railroad to R street	861	3,203.25
Second street extended, from R to T street	4,213	8,801.68
California avenue, from Eighteenth to Nineteenth street	2,153	4,473.06
First street extended, from Q to R street	2,206	7,412.73
Quincy, from Lincoln avenue to Eckington Place	3,770	12,058.26
Eckington Place, from Q to R street	1,560	4,951.70
Eighteenth street extended, from Florida avenue to Columbia road	3,206	6,472.64
Connecticut avenue extended, from California avenue to Kalorama avenue	2,195	4,414.00
California street NE., from First to Second street	1,635	5,666.10
Total	24,120	64,446.95

CURRENT REPAIRS TO STREETS, AVENUES, AND ALLEYS.

Appropriation for 1890-'91	\$15,000.00
Expended	44,953.31
Appropriation for 1891-'92	45,000.00
Estimates for 1892-'93	45,000.00

The following exhibits a summary of the work done during the year:

Grading	cubic yards..	2,996
Flag laid	linear feet..	17,049
Curb set	do	2,931
Curb reset	do	16,142
Cobble pavement laid	square yards..	40,853
Brick pavement laid	do	20,118
Asphalt-tile pavement laid	do	250
Granite-block pavement laid	do	19,041
Vitrified-brick pavement laid	do	2,512
Macadam	loads..	1,024
Sheet asphalt	square yards..	13
Drain cleaned	linear feet..	763
Resurfacing asphalt pavements	square yards..	49,976.31

SIDEWALKS.

Under the regular appropriation for street improvements the only sidewalks laid were of brick.

	Square yards.
New brick sidewalks.....	83, 611
Old brick sidewalks relaid.....	27, 879

Other walks were laid out of the appropriation for "current repairs," as follows:

	Square yards.
Brick sidewalks.....	16, 994
Asphalt tile.....	250

Under the "regular permit system:"

Asphalt tile.....	1, 416
Brick sidewalks.....	10, 307

Under the "compulsory permit system:"

Brick sidewalks.....	35, 534
Asphalt tile.....	1, 069

The sidewalks of the city of Washington contrast so badly with the roadways as to cause constant remark from strangers, and constant complaint from residents. Anything that can be devised to better this, it seems to me, would be a great advantage to the District, and I would suggest that the Commissioners pass regulations forbidding on certain streets the laying of any kind of sidewalk except the most approved, which I believe to be the granolithic or some similar pavement. This should be required on the business streets of the first class of the city and on the finest residence streets. On business streets or residence streets where property is not of such high value a grade of pavement a little below this might be laid, such as the asphalt-tile sidewalk. This forms an excellent pavement, but is less expensive than granolithic. On the minor streets and streets where the property is not improved and is of no great value the brick sidewalks might be used. By following some such scheme as this I believe it would result in a great improvement of the sidewalks throughout the city and District, and would finally give the city what it so much needs, a good class of sidewalks to compare favorably with the roadways.

CURB.

The use of the bluestone curb has been entirely discontinued in this city, except where the old curb has been taken from the streets to be permanently improved and used on streets only partially improved, such as graded and regulated streets and streets where sidewalks are laid under the permit system. Some curb has been given to outlying subdivisions, where people are desirous of improving the property, and the District has taken this method of assisting them in the same. The curb used has been granite 6 by 20 inches and 8 by 8 inches on a concrete base. The 8 by 8 curb on concrete base is the handsomest and gives the most general satisfaction, but late in the season, when the weather is too cold for laying the concrete satisfactorily, the 6 by 20 inch has been put in, and is a handsome curb, and I believe that in the future both kinds of curb should be used. The cost of the two is about the same in position.

REPAIRS TO CONCRETE PAVEMENTS.

Appropriation 1890-'91	\$120,000.00
Expended	115,856.63
Appropriation 1891-'92	150,000.00
Estimate 1892-'93	150,000.00

Repairing and resurfacing concrete pavements.

[Date of contract August 11, 1888. Number of contract 947.]

Name of contractor and locality.	Asphalt.		Total cost.	Character of work.
H. L. Cranford:	<i>Sq. yds.</i>	<i>Cu. yds.</i>		
East Capitol street, north side, from First to Ninth.	2,194.51		\$3,169.63	Resurfaced.
F street NW., from Fourteenth to Fifteenth.	3,124.28		3,698.47	Do.
Thirteenth and F streets	435.15		773.26	Do.
F street NW., from Ninth to Twelfth	5,317.30		7,527.54	Do.
Tenth street NW., from New York avenue to K.	1,613.12		2,134.52	Do.
Eighth street NW., from N to L	3,546.21		3,925.56	Do.
Fifteenth street, west side, from I to K	1,828.01		2,408.30	Do.
L street, from Sixteenth to Seventeenth	2,326.99		3,032.76	Do.
Thirteenth street SW., from B to Maryland avenue.	5,347.01		7,513.63	Do.
Twenty-first street NW., from K to Q	10,845.35		13,185.69	Do.
Pennsylvania avenue, from First to Third NW.	4,657.48		7,943.64	Do.
H street NE., from North Capitol to Second.	3,451.40		5,658.57	Do.
Nineteenth street NW., from Q to R	2,048.29		3,481.97	Do.
G street, from Eleventh to Twelfth and from Thirteenth to Fourteenth.	2,350.93		3,464.95	Do.
F street, from Twelfth to Thirteenth	890.28		1,492.64	Do.
Various		1,927.50	46,445.50	Minor repairs.
	49,976.31	1,927.50	115,856.63	

List of streets that should be resurfaced during the ensuing fiscal year.

	Approximate cost.
First street NE., B street N. to A street S.	\$5,196.36
Massachusetts avenue NW. (south side), Fourth to Seventh streets	4,996.00
Massachusetts avenue NW. (north side), intersection of Fourth street	445.00
Fifth street NW., from north curb line of H street to New York avenue ..	3,262.21
K street NW., from Third to Fifth street	8,126.00
L street NW., from New Jersey avenue to Fourth street	3,021.00
Twelfth street NW., from G to Massachusetts avenue	9,739.80
Fourteenth street NW., east side, Thomas Circle to Boundary	25,890.42
I street NW., from Thirteenth to Fourteenth streets	5,461.00
Ninth street NW., from N to P streets	4,381.00
O street NW., from Fourth to Seventh streets	7,000.00
Vermont avenue, from Thomas Circle to Iowa Circle	7,005.76
M street NW., from Sixteenth street to Connecticut avenue	7,528.00
Seventeenth street NW., from K to P streets	11,786.95
I street NW., from Sixteenth to Seventeenth streets	5,202.87
N street, from Connecticut avenue to Twenty-first street	5,216.00
Twentieth street NW., from K to L streets	1,942.81
Twentieth street NW., from M to N	3,568.00
Twentieth street NW., from New Hampshire avenue to Connecticut avenue ..	6,346.51
Nineteenth street, from Du Pont Circle to Q street	1,756.66
Nineteenth street, from R to T street	5,074.00
Twenty-second street, from G to Pennsylvania avenue	6,152.00
Pennsylvania avenue (north side), Washington Circle to Twenty-sixth street	5,257.42
K street NW., from Connecticut avenue to Eighteenth street	4,372.00
K street, from Ninth to Vermont avenue	19,142.00
Ninth street NW. (west side), from D to E street	1,302.00
Rhode Island avenue NW., from west curb line of Fifteenth street to Scott Circle, and street running north and south between Fifteenth and Sixteenth streets, Rhode Island avenue, and Massachusetts avenue.	2,870.00

Rhode Island avenue, Scott Circle to Seventeenth street	\$3,392.82
Massachusetts avenue NW., Fifteenth street to a point 215 feet west of west curb line of Fifteenth street	1,987.22
Vermont avenue, from K street to a point 215 feet north of north curb line of K street	1,727.63
Seventeenth street NW., from New York avenue to E street	3,245.76
New York avenue (north and south side), Ninth to Eleventh streets	8,029.69
H street NE. (south side), North Capitol to First street east	3,708.30
H street NE. (north side), Second street east to Fourteenth street east ..	18,974.50
S street NW. from Fourteenth street to Fifteenth streets	3,388.53
Madison street NW., from Fifteenth to Sixteenth streets	1,839.45
Thirty-third street NW., from N to O streets	1,947.75
Total	220,383.42

CONSTRUCTING COUNTY ROADS AND SUBURBAN STREETS.

Appropriation, 1890-'91	\$178,950.00
Expended	165,513.63
Balance	13,436.37

The items were as follows:

Locality.	Appropriation.	Expended.	Balance unexpended.
Linden street northward	\$5,000	\$5,000.00	.....
R street, Florida avenue to Lincoln avenue	15,000	14,845.40	\$154.60
Maple avenue, Florida avenue to Linden street	10,000	9,484.81	515.19
Larch street, Florida avenue to Maple avenue	5,000	5,000.00	.....
Kenesaw and Wallach streets	7,500	7,499.91	.09
Howard avenue	2,000	1,367.42	632.58
New Cut road	3,000	2,756.95	243.05
North Capitol street	10,000	9,966.89	33.11
Brentwood road	5,000	5,000.00	.....
First street extended, Florida avenue to T street	2,500	2,499.01	.99
Bunker Hill road	5,000	4,904.96	95.04
Seventeenth street extended	2,000	1,874.07	125.93
Ridge and Loughboro roads	5,000	4,998.55	1.45
Streets in Takoma Park	10,000	9,952.83	47.17
Minnesota avenue	10,000	7,208.37	(*)
Nichols avenue	7,000	6,999.94	.06
Fourteenth street extended	12,350	12,349.64	.36
Brightwood avenue northward	10,000	9,439.72	560.28
Lincoln avenue	10,000	9,910.34	89.66
Pennsylvania avenue	5,000	4,400.62	599.38
Laurel avenue	1000	276.00	324.00
Eighteenth street extended	7,500	7,377.74	122.26
Brightwood avenue, from Rock Creek Church road north	10,000	9,990.70	9.30
Sherman avenue	5,000	.....	5,000.00
Connecticut avenue	5,000	4,989.13	10.87
Naylor road	2,500	2,489.38	10.62
California avenue, Columbia road westward	5,000	4,998.58	1.42
Nourse road	2,000	.....	2,000.00
Total	178,950	165,513.63	.....

* Incomplete.

The work done under the appropriations for 1890-'91 is now about completed. The work has been done well and in accordance with the specifications, except on a few graded and regulated streets and roads. I heard that on one of the streets there was a shortage of macadam, the specifications calling for 12 inches and one-half inch of gravel. I at once proceeded to have the work carefully examined by cutting trenches across the street at intervals and measuring the thickness of macadam found.

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The following shows the results obtained:

Locality.	Contractor.	Thickness of macadam.	
		Re-quired.	Found.
		Inches.	Inches.
Brentwood road, from R to Patterson avenue.....	W. H. Mohler.....	12	13 $\frac{1}{2}$
I SE., from Third to Eighth.....	do.....	12	11 $\frac{7}{8}$
Seventh SE., from Virginia avenue to M.....	do.....	12	10 $\frac{1}{2}$
B SE., from Eleventh to Nineteenth.....	E. E. Barnes.....	12	12
Eighth NE., from I to K.....	A. Gleeson.....	12	10 $\frac{3}{4}$
Twelfth NE., from Maryland avenue to H.....	do.....	12	9
G NE., from Sixth to Seventh.....	do.....	12	9 $\frac{1}{2}$
Thirty-fourth NW., from R to High.....	J. Dugan.....	12	6 $\frac{1}{2}$
Delaware avenue SW., from C to G.....	W. H. Mohler.....	12	13
Tenth SE., from East Capitol to Pennsylvania avenue.....	do.....	12	11. 33
Second SE., from D to G.....	do.....	12	10 $\frac{1}{2}$
North Capitol extended, from Florida avenue to T.....	M. F. Talty.....	12	10 $\frac{1}{2}$
California avenue, from Columbia road westward.....	do.....	12	11 $\frac{1}{2}$
Linden, from Maple avenue to Pomeroy.....	do.....	12	11 $\frac{1}{2}$
First extended, from Florida avenue to T.....	W. F. Collins.....	12	9 $\frac{1}{2}$
Howard avenue, from Sixth to Brightwood avenue.....	M. F. Talty.....	12	12 $\frac{1}{2}$

The following statement shows the shortages beyond the limits fixed by this office as allowable and the dates of settlement with the contractors:

Locality.	Contractor.	Deficit.	Remarks.
Seventh street SE., from Virginia avenue to M.	W. H. Mohler.....	\$265. 55	Settled Dec. 7, 1891.
Eighth street NE., from I to K.....	A. Gleeson.....	184. 94	Settled Nov. 18, 1891.
Twelfth street NE., from Maryland avenue to H.	do.....	844. 23	Do.
G street NE., from Sixth to Seventh.....	do.....	432. 17	Do.
Thirty-fourth street NW., from R to High.....	J. Dugan.....	563. 96	Settled Nov. 24, 1891.
Second street SE., from D to G.....	W. H. Mohler.....	243. 40	Settled Dec. 7, 1891.
North Capitol street extended, from Florida avenue to T.	M. F. Talty.....	419. 14	Settled Nov. 4, 1891.
First street W. extended, from Florida avenue to T.	W. F. Collins.....	212. 75	Settled Nov. 21, 1891.

SIDEWALKS ABOUT PARKS, PUBLIC RESERVATIONS, AND BUILDINGS.

I wish to call attention once more to this matter. These spaces belong to the General Government and I hope that they will soon be made a model to the citizens instead of being left, as some of them now are, among the worst in the city.

I would ask that Congress be requested to appropriate money for this purpose to be expended by the officers of the United States.

REPAIRS TO COUNTY ROADS.

Appropriation, 1890-'91.....	\$60, 000. 00
Expended.....	59, 994. 59
Appropriation, 1892.....	60, 000. 00
Estimate, 1892-'93.....	60, 000. 00

The details of the work are given in the report of Mr. Beale, superintendent of county roads, which is appended.

The expenses in the different sections were as follows:

Central section.....	\$35, 485. 39
Eastern section.....	10, 625. 22
Western section.....	13, 883. 98
Total.....	59, 994. 59

There are many miles of new streets, avenues, and roads being laid off in the District outside the city limits, and the travel is increasing, and a heavy additional cost is entailed to keep all in order and repair. It is hoped that for this purpose the full amount of the estimate, \$60,000, may be obtained.

GRADING STREETS, AVENUES, AND ALLEYS.

Appropriation, 1890-'91.....	\$20,000.00
Expended, 1890-'91.....	18,468.50
Appropriation, 1891-'92.....	20,000.00
Estimate, 1892-'93.....	20,000.00

CONDEMNATION OF STREETS, AVENUES, AND ALLEYS.

Appropriation, 1890-'91.....	\$5,000.00
Expended, 1891-'91.....	1,605.96
Appropriation, 1891-'92.....	10,000.00
Estimate, 1892-'93.....	5,000.00

The importance of securing the extension of the avenues and principal streets at once needs no remarks from me. Every day this is put off the cost is greatly increased and early action should be taken. The beautiful plan of the city has been departed from in the subdivisions just outside of the city proper, and this land, now become valuable, is laid off in the most unfortunate manner. It is now so built up in places as to render it impracticable to make any but minor changes. The city of Washington in its plan is a monument to those under whose wise management it was laid out and now this work should be done for the future throughout the rest of the District.

I regard this as the most important consideration in connection with the surface department.

PARKING COMMISSION.

Appropriation, 1890-'91.....	\$18,000.00
Expended, 1890-'91.....	17,998.97
Appropriation, 1891-'92.....	19,000.00
Estimate, 1892-'93.....	20,000.00

The following is the statement of the work done, trees planted, etc., during the fiscal year:

Trees in streets July 1, 1890.....	67,967
Trees planted during the year.....	2,631
Total.....	70,598
Trees removed, lost by storm, etc.....	784
Total number June 30, 1891.....	69,814

I desire to invite special attention to the reports of the parking commission and the superintendent of the parking commission, which are appended. One of the chief attractions of the city are the beautiful trees now lining most of the streets, and as the streets extend farther and farther into the District the expenses of the parking commission are largely increased; and although I have been compelled by reason of the financial condition of the District to ask for no more money than I do, yet more is needed, and I would suggest that the planting of trees outside of the city be done under the permit system, as in the case of laying sidewalks, requiring the owners, however, to pay all the cost of planting, the District merely furnishing the trees and doing the work.

BRIDGES.

Ordinary care of bridges:	\$5,000.00
Appropriation, 1890-'91	3,927.30
Expended, 1890-'91	5,000.00
Appropriation, 1891-'92	5,000.00
Estimate, 1892-'93	
Construction and repair of bridges:	20,000.00
Appropriation, 1890-'91	19,920.88
Expended, 1890-'91	15,000.00
Appropriation, 1891-'92	15,000.00
Estimate, 1892-'93	

There have been no extra expenditure on bridges this year due to any floods or serious damage of any kind. The bridges across the Chesapeake and Ohio Canal, in Georgetown, need attention. They are of great importance to the citizens of Georgetown and should be kept up.

I desire particularly to speak of the Anacostia bridge, which is an old structure and a most unsatisfactory one, very deficient in width for the large travel now using it. The draw, as now constructed and operated, is a great nuisance to the people. The bridge itself is deficient in strength, and some of the piers have apparently settled out of place.

The bridge is 20 feet in width, with two sidewalks of 5 feet each. It is 1,256 feet long between end piers; the floor is 9 feet above low water or 5 feet above high water. It has a draw span of 30 feet on the Bascule principle, operated by man power.

My predecessor estimated for this bridge a cost of \$85,000 for raising the same and extending the embankment, so as to reduce the number of spans to six, doubling the width by putting the spans not needed beside those that would be left in position.

I believe myself that it would be better to build an entirely new bridge, and that an appropriation of \$250,000 should be made for the same, the spans of the old bridge to be used wherever proper for small bridges needed throughout the District.

The old wooden Bennings bridge over the Eastern Branch is being replaced by an iron-girder bridge, an appropriation of \$60,000 having been made by the last Congress for this purpose.

The iron bridge over Rock Creek at K street NW. should be raised.

The Chain Bridge is in apparently good condition, and the same may be said of the Aqueduct or free bridge.

The Baltimore and Potomac Railroad have built a new track under the western span of the Pennsylvania avenue bridge over the Eastern Branch during the past fiscal year. The embankment caused a movement in the western pier of the bridge. The railroad company have given a bond to make good any damage, but as yet this has been slight.

NEW BRIDGES NEEDED.

A bridge should be built over Rock Creek along the line of Massachusetts avenue extended.

The bridge across the Potomac River to connect the city with Arlington, although a national matter, I hope the Commissioners will recommend.

STEAM RAILROADS.

This question has not yet reached a satisfactory solution. As our country grows in population the time must come when grade crossings of ordinary and steam roads will no longer be permitted anywhere. This time, it seems to me, has come in this city and will shortly come throughout the District. It may be urged that the whole expense of

the costly changes necessary to accomplish this should not be borne by the railroad. I would suggest that the Commissioners ask Congress to require the change to be made and appoint a committee to lay out a plan for same, with the proportion of cost to be borne by the railroads and the Government.

STREET RAILWAYS.

This city has suffered great inconvenience throughout the year by reason of the large amount of work done by the different companies in changing to the grooved rail, and in the case of the Washington and Georgetown Railroad putting down a cable system.

The end seems to be now in sight and the result will be very beneficial.

HERDIC LINES.

I would respectfully repeat my views of last year on this subject. I would also ask that the Commissioners urge on Congress the passage of a bill regulating the width of tires, not only for these large and heavy vehicles, but for all others hauling heavy loads. From the best authorities on this subject, I think these tires should be $4\frac{1}{2}$ inches wide.

THE DISTRICT VETERINARIAN.

Although not an official of the engineer department, the District veterinarian is required to look after all the horses in this department as well as in others. During the past year he has given faithful service, and I believe that his compensation should be increased if possible.

PROPERTY YARDS.

The property yards are under the charge of the inspector of property, and in them new materials, such as curb, granite blocks, asphalt blocks, and tiles, sewer pipes, cement, sand, broken stone, etc., have to be received, inspected, stored, and cared for until used. Old material taken from one street has to be stored and worked over to fit it for use in some other localities. I believe it will soon be necessary for more property yards to be provided for in the District, so as to leave this property in more convenient situations for use in all parts of the city.

SURVEYOR'S OFFICE.

The surveyor's office being a feed office the work to be done by the office for the District has to be paid for the same as though it were done for private individuals. I believe it would be more satisfactory, the records would become more quickly available, and the work of the District would become much more advantageous could this office be made a salaried office, and I would suggest the following estimate of cost to properly equip and run it on a salary basis, it being the same as that suggested by my predecessor:

SALARIES.

1 surveyor	\$3, 600
1 assistant surveyor	1, 800
1 draftsman and computer	1, 500
1 clerk	1, 400
1 messenger	600
4 rodmen, at \$780	3, 120
2 axemen, at \$720	1, 440
	13, 460

294 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Contingent expenses the first year would be large, to provide horses, wagons, and harness, the keeping of the same, new instruments, repairs to instruments, stationery, printing, etc \$2,000

15,460

Add the item previously mentioned for copying old records, mounting maps, books, and plating, and providing proper storage 5,000

20,460

Fees at present paid by property owners for work done should be collected and paid to the collector of taxes the same as other fees now charged in the District, and go into the general fund.

IMPROVEMENT OF ROCK CREEK.

The Zoölogical and Rock Creek parks will give the United States control of Rock Creek from south of the Adams Mill road to the District line.

I am of the opinion that below this the creek should be arched over and made a covered sewer to the river. The cost of this work I am not prepared to estimate, but would suggest that an annual appropriation of \$100,000 should be made until this work is done.

MAPS.

I have had prepared and forward with this report maps. They follow those published in the annual report for 1880, and by comparison with them show the advances made. I think these should be printed every decade and will thus furnish a pictorial history of the improvements of the city.

Very respectfully, your obedient servant,

WM. T. ROSSELL,

Captain, Corps of Engineers,

The ENGINEER COMMISSIONER, DISTRICT OF COLUMBIA.

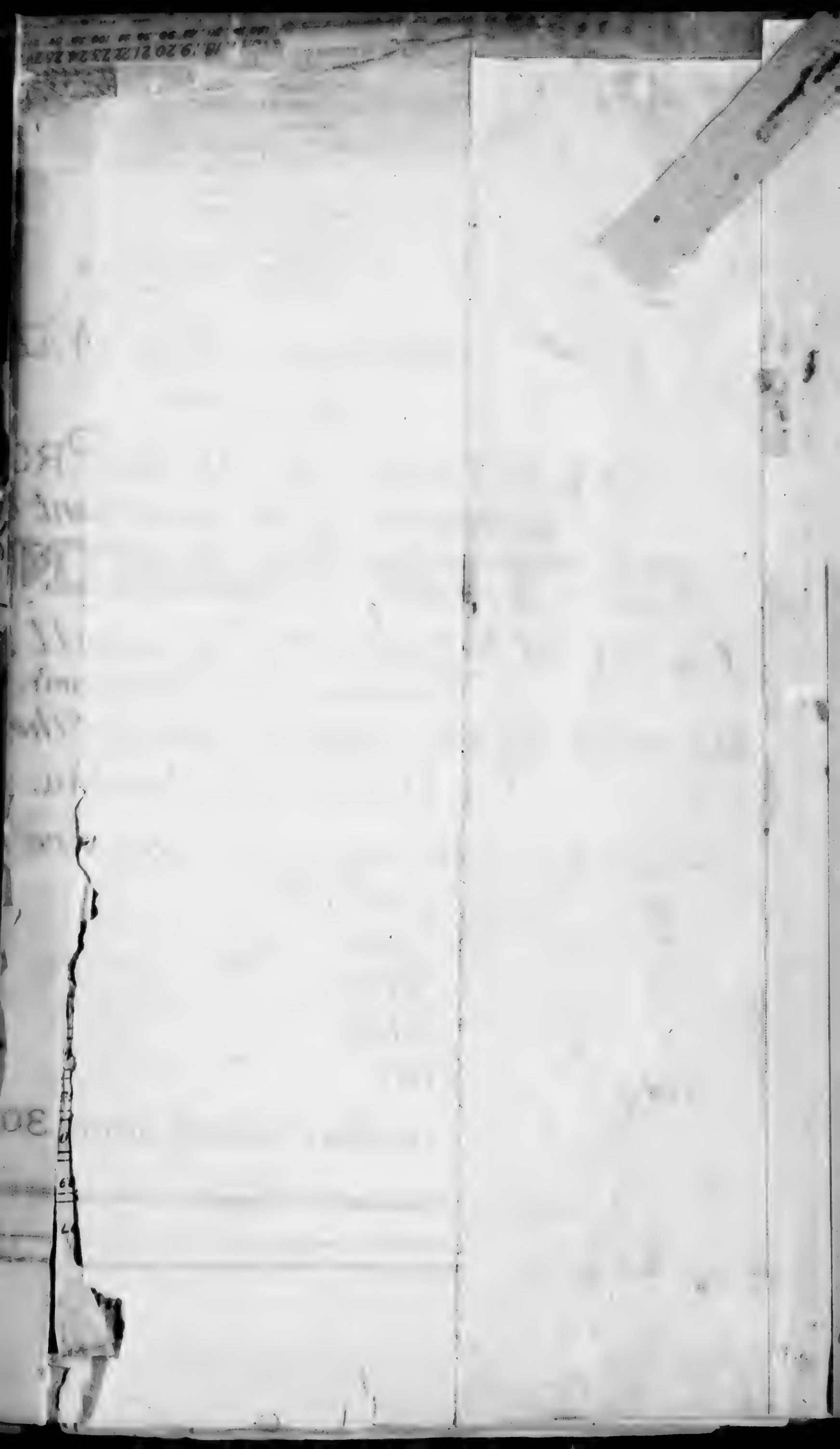
B.—REPORT OF CAPT. JAMES L. LUSK, CORPS OF ENGINEERS, U. S. ARMY, ASSISTANT TO THE ENGINEER COMMISSIONER OF THE DISTRICT OF COLUMBIA.

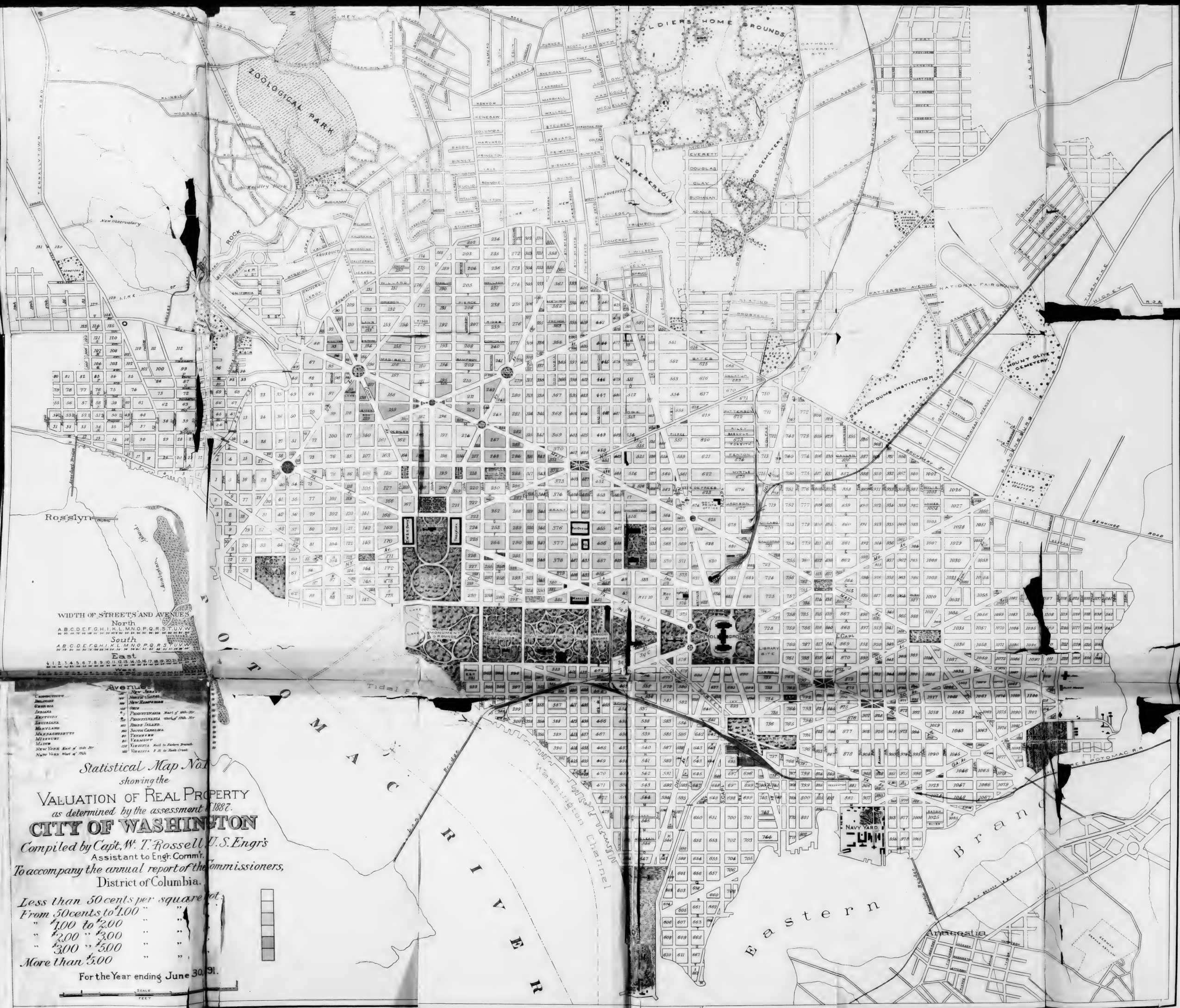
WASHINGTON, *December 5, 1891.*

SIR: I have the honor to submit the following report of the operations of the branches of the engineer department, District of Columbia, under my supervision during the fiscal year 1891:

WATER DEPARTMENT.

During the year under consideration the officer in charge of the Washington Aqueduct laid a 24-inch main on Eleventh street west, between K street and U street, thereby providing an important line for the purposes of cross-connection and reinforcement. The same officer laid an additional line of 36-inch and 30-inch pipe on New Jersey avenue NW., between L and B streets, and one of 24-inch pipe on K street N., between New Jersey avenue and Eleventh street E. The former line will be of advantage in maintaining the supply on Capitol Hill, and by the latter the pressures have been greatly increased throughout a large part of the northeast section. During the year the officer in charge of the Washington Aqueduct transferred to the Commissioners of the Dis-





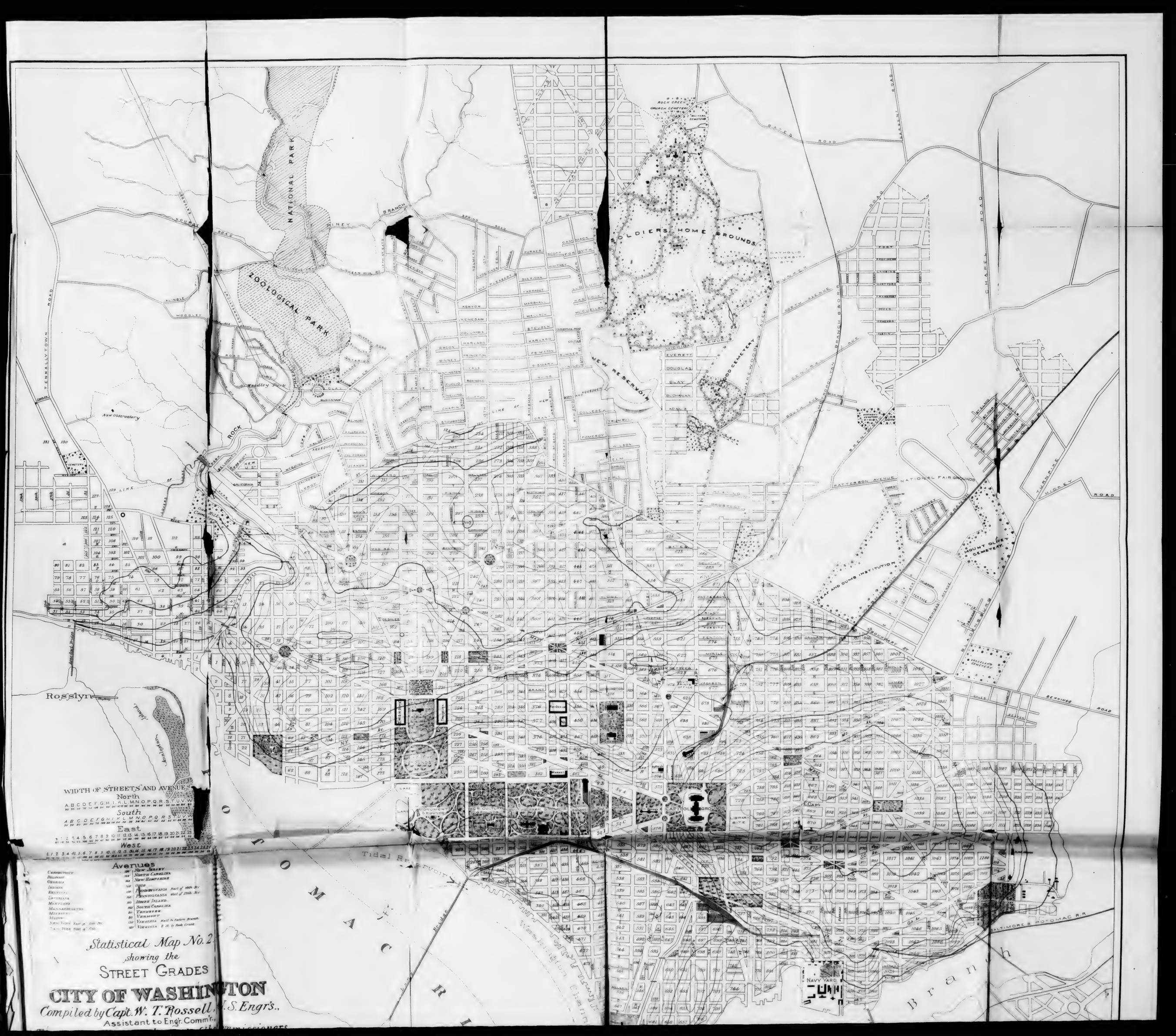
WIDTH OF STREETS AND AVENUES

North	South	East	West
A B C D E F G H I J K L M N O P Q R S T U V W	A B C D E F G H I J K L M N O P Q R S T U V W	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	A B C D E F G H I J K L M N O P Q R S T U V W

Statistical Map Not
showing the
VALUATION OF REAL PROPERTY
as determined by the assessment of 1887.
CITY OF WASHINGTON
Compiled by Capt. W. T. Russell U.S. Engrs
Assistant to Engr. Commr.
To accompany the annual report of the Commissioners,
District of Columbia.

Less than 50 cents per square lot.
From 50 cents to 1.00 "
" 1.00 to 2.00 "
" 2.00 to 3.00 "
" 3.00 to 5.00 "
More than 5.00 "

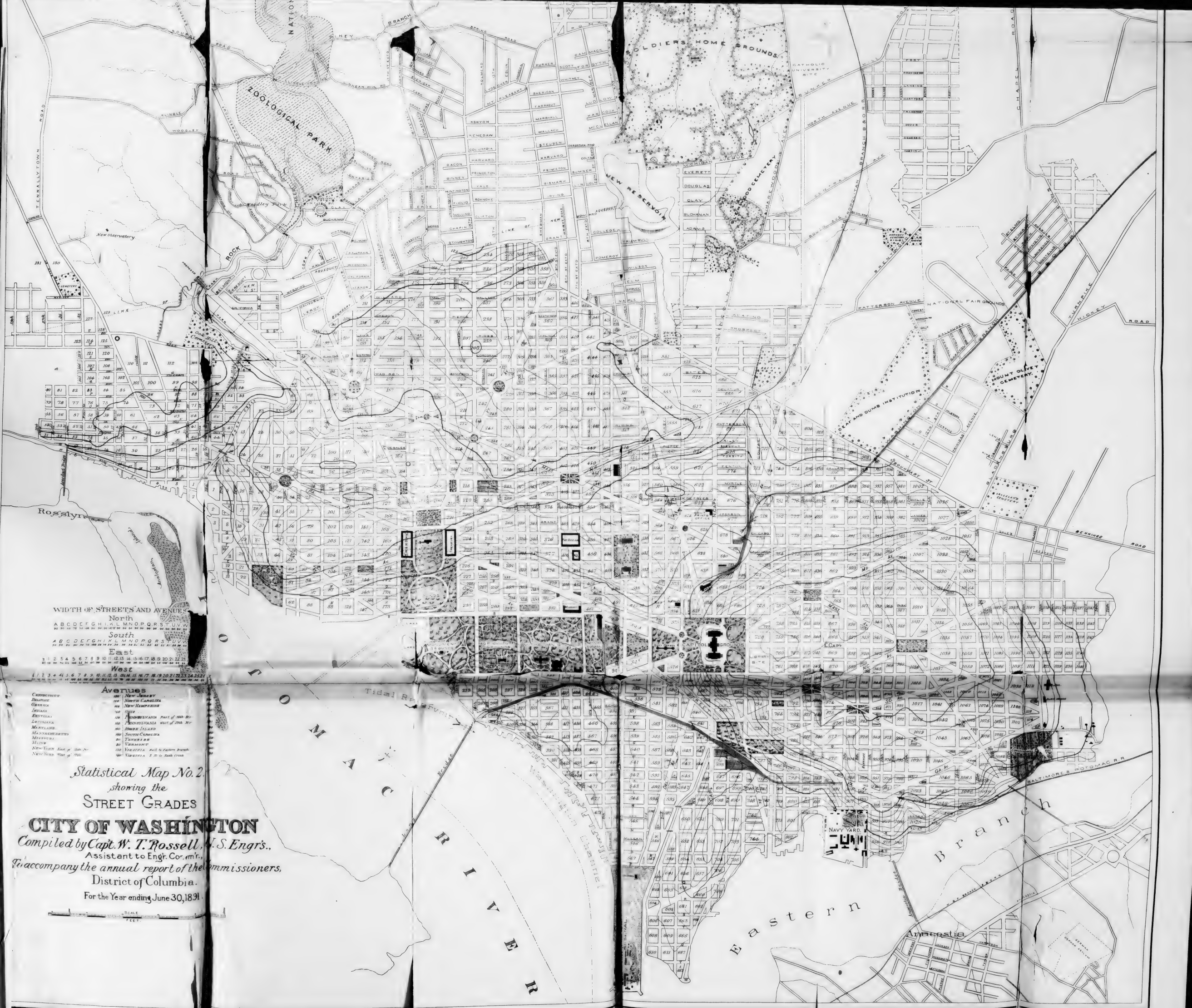
For the Year ending June 30, 1891.



WIDTH OF STREETS AND AVENUES
North
ABCDEFGHIJKLMN O P Q R S T U V W
South
ABCDEFGHIJKLMN O P Q R S T U V W
East
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
West
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

- Avenues
- 100 NEW JERSEY
 - 101 NEW YORK
 - 102 NEW HAMPSHIRE
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 - 138 NEW HAMPSHIRE
 - 139 NEW HAMPSHIRE
 - 140 NEW HAMPSHIRE
 - 141 NEW HAMPSHIRE
 - 142 NEW HAMPSHIRE
 - 143 NEW HAMPSHIRE
 - 144 NEW HAMPSHIRE
 - 145 NEW HAMPSHIRE
 - 146 NEW HAMPSHIRE
 - 147 NEW HAMPSHIRE
 - 148 NEW HAMPSHIRE
 - 149 NEW HAMPSHIRE
 - 150 NEW HAMPSHIRE

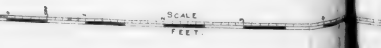
Statistical Map No. 2
showing the
STREET GRADES
CITY OF WASHINGTON
Compiled by Capt. W. T. Rossell, U.S. Engrs.,
Assistant to Engr. Commr.



WIDTH OF STREETS AND AVENUES
North
ABCDEFGHIJKLMNPOQRSTUVWXYZ
South
ABCDEFGHIJKLMNPOQRSTUVWXYZ
East
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
West
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

- Avenues
- 100 New Jersey
 - 101 North Carolina
 - 102 New Hampshire
 - 103 Ohio
 - 104 Pennsylvania west of 10th St
 - 105 Rhode Island
 - 106 South Carolina
 - 107 Tennessee
 - 108 Virginia
 - 109 New York East of 10th St
 - 110 New York West of 10th St

Statistical Map No. 2.
showing the
STREET GRADES
CITY OF WASHINGTON
Compiled by Capt. W. T. Russell, U.S. Engrs.,
Assistant to Engr. in Charge,
To accompany the annual report of the Commissioners,
District of Columbia.
For the Year ending June 30, 1891.





WIDTH OF STREETS AND AVENUES

North	South	East
120	120	120
100	100	100
80	80	80
60	60	60
40	40	40
20	20	20

Avenues

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st	32nd	33rd	34th	35th	36th	37th	38th	39th	40th	41st	42nd	43rd	44th	45th	46th	47th	48th	49th	50th	51st	52nd	53rd	54th	55th	56th	57th	58th	59th	60th	61st	62nd	63rd	64th	65th	66th	67th	68th	69th	70th	71st	72nd	73rd	74th	75th	76th	77th	78th	79th	80th	81st	82nd	83rd	84th	85th	86th	87th	88th	89th	90th	91st	92nd	93rd	94th	95th	96th	97th	98th	99th	100th
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Statistical Map No. 3.
Showing the Varieties of
STREET PAVEMENTS,
CITY OF WASHINGTON
Laid and under Contract on June 30, 1892



WIDTH OF STREETS AND AVENUES

North	South	East	West
12345678910111213141516171819202122	12345678910111213141516171819202122	12345678910111213141516171819202122	12345678910111213141516171819202122

Avenues

12345678910111213141516171819202122	12345678910111213141516171819202122
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Statistical Map No. 3.
Showing the Varieties of
STREET PAVEMENTS,
CITY OF WASHINGTON
Laid and under Contract on June 30, 1892.
Compiled by Capt. W. T. Rossell, U.S. Engrs.
Assistant to Engr. Commr.
To accompany the annual report of the Commissioners,
District of Columbia.
White and Blue Rock Pavements shown this
Grounds and Trip Rock
Gravelled
Asphalt and Coal Tar
Macadam
Asphalt Block
Proposed Improvements, 1892-3.



Reference.

BOTANICAL NAME.	COMMON NAME.	BOTANICAL NAME.	COMMON NAME.
41 <i>Acer campestre</i>	Turntable-leaved maple	51 <i>Quercus palustris</i>	Pin oak
1 <i>" dasycarpum</i>	Silver maple	35 <i>" rubra fastigiata</i>	Upright oak
13 <i>" platanoide</i>	Norway "	34 <i>" rubra</i>	Red
17 <i>" pseudoplatanus</i>	Sycamore "	49 <i>Rubia pseudacacia</i>	Locust
14 <i>" rubrum</i>	Scarlet "	38 <i>Salix babylonica</i>	Weeping willow
15 <i>" saccharinum</i>	Sugar "	29 <i>" pentandra</i>	Laurel-leaved willow
16 <i>" nigrum</i>	" (black)	12 <i>Salix adiantifolia</i>	Ginko
36 <i>Fesculus hippocastanum</i>	Horsechestnut	2 <i>Tilia americana</i>	American linden
42 <i>Cedrela sinensis</i>	Catalpa	18 <i>" europea</i>	European "
9 <i>Catalpa bignonioides</i>	White Ash	30 <i>Taxodium distichum</i>	Deciduous cypress
21 <i>Fraxinus americana alba</i>	Honey locust	23 <i>Ulmus americana</i>	American elm
28 <i>Gleditsia triacanthos</i>	Chinese "	24 <i>" alata</i>	Winged
7 <i>" sinensis</i>	Kentucky coffee	39 <i>" compestris</i>	European field elm
10 <i>Gymnocladus canadensis</i>	Chinese cypress	25 <i>" racemosa</i>	Raceme flowered elm
31 <i>Glyptostrobus sinensis</i>	Black Walnut	43 <i>" montana</i>	Scotch elm
57 <i>Juglans nigra</i>	Sweet gum	44 <i>Acer campestre austriaca</i>	Austrian maple
37 <i>Koelreuteria paniculata</i>	Tulip	45 <i>" dasycarpum Weirii</i>	Weirs cut-leaf maple
11 <i>Liquidambar styraciflua</i>	Negundo	46 <i>" platanoideis Schmedleri</i>	Schwedleri
6 <i>Liriodendron tulipifera</i>	Carolina poplar	47 <i>" tartaricum</i>	Tartarian "
26 <i>Negundo fraxinifolium</i>	Cottonwood	48 <i>Betula alba</i>	White birch
19 <i>Populus angulata</i>	Turkeystan poplar	50 <i>" nigra</i>	Black "
21 <i>" alba</i>	Athenian "	52 <i>Branstonetia papyrifera</i>	Paper mulberry
22 <i>" balsana</i>	Large-tooth leaved "	53 <i>Celtis occidentalis</i>	Nettle tree
32 <i>" glauca</i>	Lombardy "	54 <i>Cercis canadensis</i>	Judas tree
63 <i>" grandidentata</i>	American aspen "	55 <i>Diopyrus virginica</i>	Persimmon
20 <i>" nigra fastigiata</i>		56 <i>Juglans regia</i>	Walnut
40 <i>" tremuloides</i>		58 <i>" cinerea</i>	Butternut
5 <i>Phellodendron amurense</i>	Zelkova	59 <i>Laurus sassafras</i>	Sassafras
8 <i>Planera crenata</i>	Sycamore	60 <i>Maclura aurantiaca</i>	Osage orange
3 <i>Platanus occidentalis</i>	Eastern plane	61 <i>Morus alba</i>	White mulberry
4 <i>" orientalis</i>	Swamp white oak	62 <i>Paulonia imperialis</i>	Paulonia
33 <i>Quercus bicolor</i>		65 <i>Populus canadensis</i>	Grey poplar
		64 <i>Tilia europea argentea</i>	(Silver Linden)

WIDTH OF STREETS AND AVENUES

North

AB C D E F G H I J K L M N O P Q R S T U V

South

AB C D E F G H I J K L M N O P Q R S T U V

East

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

West

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Avenues

1st New Jersey

2nd New Hampshire

3rd New Hampshire

4th New Hampshire

5th New Hampshire

6th New Hampshire

7th New Hampshire

8th New Hampshire

9th New Hampshire

10th New Hampshire

11th New Hampshire

12th New Hampshire

13th New Hampshire

14th New Hampshire

15th New Hampshire

16th New Hampshire

17th New Hampshire

18th New Hampshire

19th New Hampshire

20th New Hampshire

21st New Hampshire

22nd New Hampshire

23rd New Hampshire

24th New Hampshire

25th New Hampshire

26th New Hampshire

27th New Hampshire

28th New Hampshire

29th New Hampshire

30th New Hampshire

31st New Hampshire

32nd New Hampshire

33rd New Hampshire

34th New Hampshire

35th New Hampshire

36th New Hampshire

37th New Hampshire

38th New Hampshire

39th New Hampshire

40th New Hampshire



WIDTH OF STREETS AND AVENUES

North

AB C D E F G H I J K L M N O P Q R S T U V W X Y Z

South

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

East

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

West

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Avenues

1st New Jersey

2nd New York

3rd New York

4th New York

5th New York

6th New York

7th New York

8th New York

9th New York

10th New York

11th New York

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272nd New York

273rd New York

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280th New York

281st New York

282nd New York

283rd New York

284th New York

285th New York

286th New York

287th New York

288th New York

289th New York

290th New York

291st New York

292nd New York

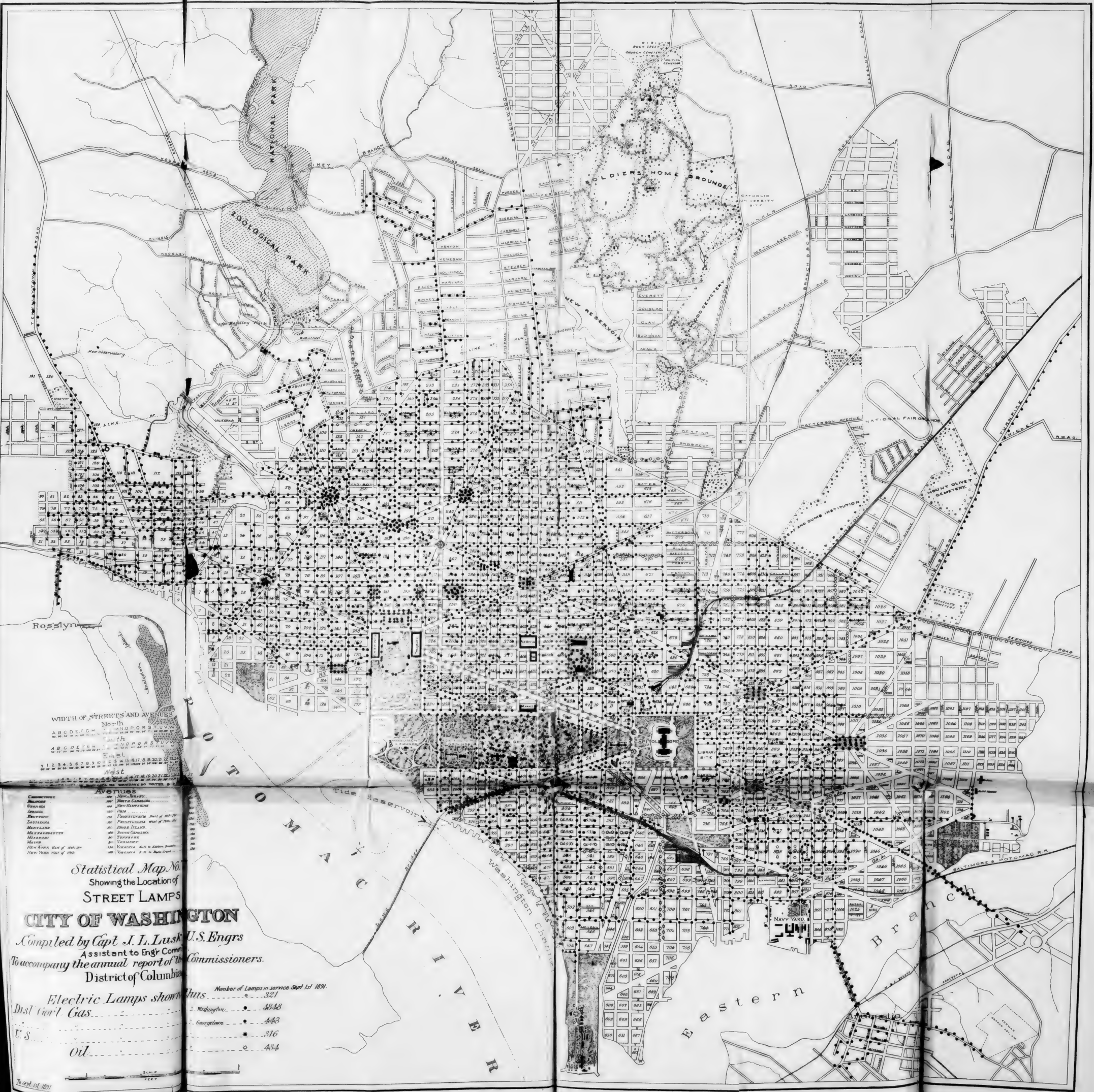
293rd New York

294th New York

295th New York

296th New York

297th New



WIDTH OF STREETS AND AVENUES
North
ABCDEFGHIJKLMNPOQRSTUVWXYZ
South
ABCDEFGHIJKLMNPOQRSTUVWXYZ
East
123456789012345678901234567890
West
123456789012345678901234567890

Statistical Map No. 1
Showing the Location of
STREET LAMPS
CITY OF WASHINGTON
Compiled by **Capt. J. L. Lusk, U.S. Engrs**
Assistant to Engr Commr
To accompany the annual report of the Commissioners.
District of Columbia
Electric Lamps shown thus
Dist. for Gas
U. S.
Oil

Number of Lamps in service Sept 1st 1891.

Washington	4348
Georgetown	443
U. S.	316
Oil	434



WIDTH OF STREETS AND AVENUES
North
A B C D E F G H I J K L M N O P Q R S T U V W
South
A B C D E F G H I J K L M N O P Q R S T U V W
East
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
West
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Avenues

- New Jersey
- New York
- New Hampshire
- Delaware
- Connecticut
- Massachusetts
- Virginia
- North Carolina
- South Carolina
- Florida
- Alabama
- Georgia
- Mississippi
- Louisiana
- Arkansas
- Oklahoma
- Nebraska
- Kansas
- Colorado
- Wyoming
- Idaho
- Montana
- Utah
- Nevada
- Arizona
- New Mexico
- California
- Oregon
- Washington
- Oregon
- Idaho
- Montana
- Wyoming
- Nebraska
- Kansas
- Colorado
- Utah
- Nevada
- Arizona
- New Mexico
- California
- Oregon
- Washington

Statistical Map No. 1
Showing the location of the stations of the
POLICE & FIRE DEPARTMENTS,
CITY OF WASHINGTON
Compiled by *Capt. W. T. Rossell*, U.S. Engrs.
Assistant to Engr. Comm.
To accompany the annual report of the Commissioners,
District of Columbia.
Fire Engine Houses shown thus:
" Alarm Boxes " "
Limits of Fire Districts " "
Police Stations " "
" Patrol Boxes " "
For the Year ending June 30, 1908.





WIDTH OF STREETS AND AVENUES

North
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

South
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

East
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

West
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Avenues
1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th

Statistical Map No. 11.
Showing the
SCHEDULE OF STREET SWEEPING,
CITY OF WASHINGTON
Compiled by Capt. W. T. Rossell, U.S. Engrs.
Assistant to Engr. Commr.
To accompany the annual report of the Commissioners,
District of Columbia.
Streets swept daily are represented thus:
" " 3 times per week " "
" " 1 " " " " "
" " 2 " " " " "
For the Year ending June 30, 1891.



WIDTH OF STREETS AND AVENUES

North	South
AB	AB
CD	CD
EF	EF
GH	GH
IK	IK
LM	LM
NO	NO
PR	PR
ST	ST

East

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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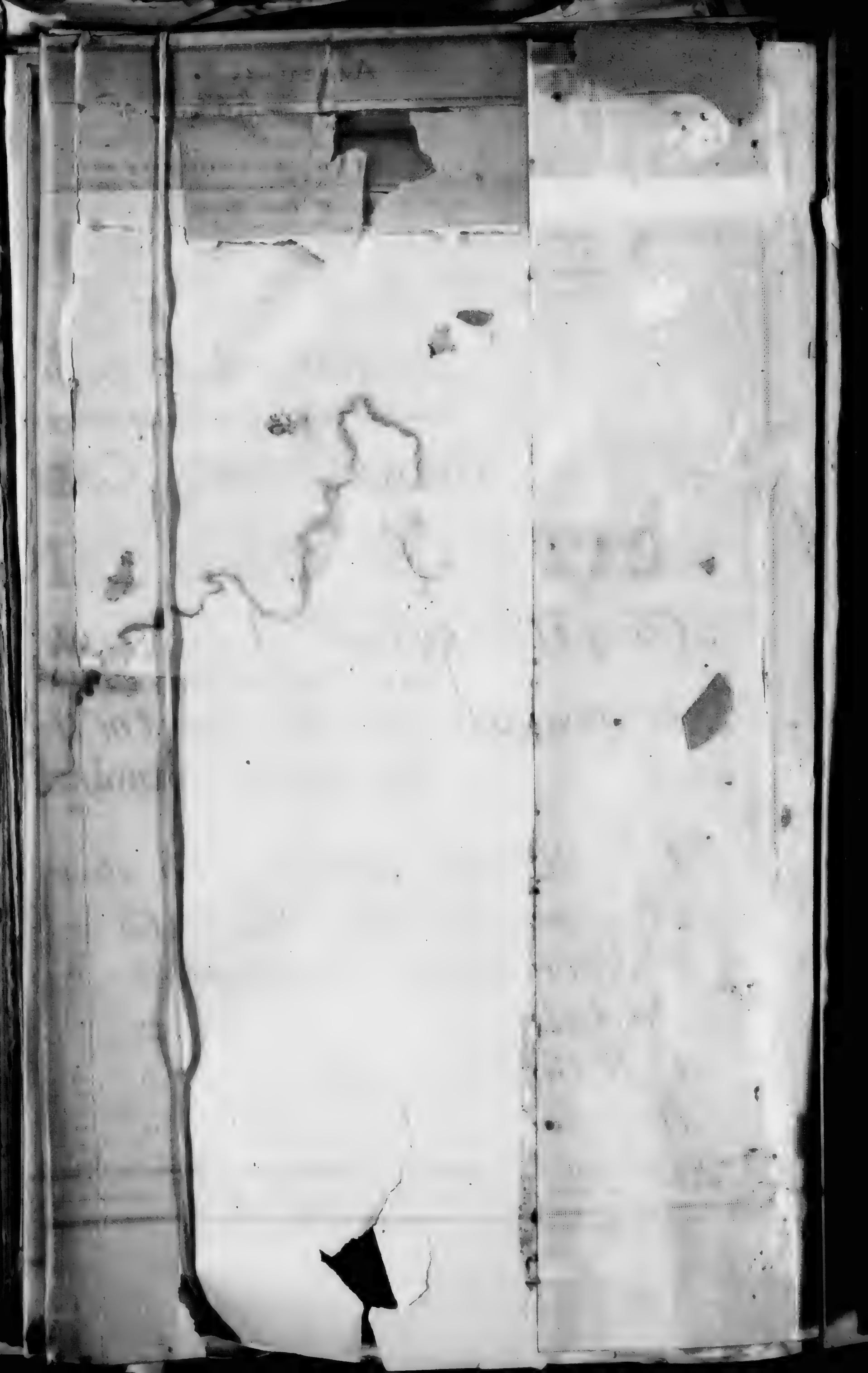
Avenues

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Statistical Map of
— Showing the Location of —
UNDERGROUND CABLES.
CITY OF WASHINGTON
Compiled by Capt. J. L. Lusk, U.S. Engrs
Assistant to Engr. Comm.
To accompany the annual report of the Commissioners.
District of Columbia

	MILES OF CONDUIT
U.S. Electric Lighting Co. show	2.1%
Chesapeake and Potomac Tel. Co.	9.9%
Western Union Telegraph	13%
Postal	2%
U.S. Government	2%
Dist. of Columbia	4.5%

To Dec 31, 1901



District of Columbia the control of 131 valves located on the outlets of the large supply mains.

The principal extension of the District's water service consisted in the laying of a 12-inch main from the standpipe on Meridian Hill to Fourteenth street extended and Park street. In contracts for material entered into during the spring of 1891, provision was made for the necessary mains to supply Anacostia, and by the end of the present calendar year that suburb will have water mains and fire hydrants upon many of its streets.

The total length of mains laid by the distribution branch of the Water Department during the fiscal year 1891 was 77,450 lineal feet, of which 5,168 was on account of the Washington and Georgetown Railroad Company in making changes due to the extension of that company's cable-railway system.

The following tables (1 and 2) summarize the condition of the distribution system on June 30, 1891:

TABLE 1.

New mains laid.	Feet.	New mains laid.	Feet.
12 inches diameter.....	5,193	Connections for fire hydrants.....	1,201
6 inches diameter.....	54,228	Intersections laid.....	2,871
4 inches diameter.....	3,055	Mains lowered.....	1,402
3 inches diameter.....	10,902		
Valve casings changed to grade.....	105	New hydrants to replace old ones.....	34
Valves repaired.....	132	Hydrants moved to new curb.....	8
Fire hydrants erected.....	72	Hydrants repaired.....	682
Fire hydrants changed to grade.....	1	New drinking fountains erected.....	2
Fire hydrants moved.....	1	New fountains to replace old ones.....	0
Fire hydrants repaired.....	917	Drinking fountains repaired.....	133
Taps made.....	1,880	Services laid to curb.....	0
New hydrants erected.....	12	Services lowered (number).....	16
Hydrants removed and abandoned.....	7	Boxes adjusted to new grade.....	715

TABLE 2.—Summary statement of distribution system.

	In service prior to June 30, 1890.	Added during fiscal year 1891.	3,000.00
	Linear feet.	Linear feet.	Linear
75 inches diameter.....	662		10.00
48 inches diameter.....	29,736		2921.80
36 inches diameter.....	22,677	*568	23,1.77
30 inches diameter.....	32,877	*3,842	36,6.38
24 inches diameter.....	2,757	*11,902	14,6.38
20 inches diameter.....	20,329		20,3.51
12 inches diameter.....	76,615	†5,201	81,81
10 inches diameter.....	12,141		12,141.6
8 inches diameter.....	5,925		5,925
6 inches diameter.....	749,100	†58,004	807,194
4 inches diameter.....	18,867	3,142	22,009
3 inches diameter.....	29,292	11,013	40,305
and 1 inch mains to fire hydrants.....	26,280		26,280
1 inches diameter and smaller.....	108,030		108,030
Total.....	1,135,288	93,762	1,229,050
Stop valves.....	No. 1,643	No. 1274	No. 1,917
Fire hydrants.....	1,085	72	1,157
Street hydrants.....	280	12	292
Service connections.....	33,270	2,141	35,411
Taps.....	26,990	1,880	28,870

* Laid by the United States.

† Including 5,168 feet laid for account Washington and Georgetown Railroad Company.

One hundred and thirty-one stop valves transferred from United States.

Fourteen street hydrants have been abandoned.

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Statement of fire hydrants, street hydrants, etc., in the several sections of the city.

	Fire hydrants.	Street hydrants.	Pumps.	Horse foun- tains.	Public foun- tains.
Georgetown.....	83	39	17	2	1
Northwest.....	662	129	108	30	31
Northeast.....	130	31	31	3	6
Southwest.....	119	47	41	3	.....
Southeast.....	163	41	67	3	1
Total.....	1,157	287	264	41	39

The subjoined financial statement shows the receipts and expenditures for the fiscal year 1891.

Financial statement for fiscal year 1890-'91.

Receipts from July 1, 1890, to June 30, 1891, inclusive:

Water tax:

Current tax.....	\$45,055.34
Advertised tax.....	2,863.02
	<u>\$47,918.36</u>

Interest

On current tax.....	-774.03
On advertised tax.....	1,630.54
	<u>2,404.57</u>

Water rents..... 209,664.29

Water taps for services..... 5,640.00

Permits for attachments, etc..... 4,700.52

Water for building purposes..... 2,169.27

272,497.01

One-half cost Fourteenth street main west, taken from water fund last year, credited to District of Columbia by act of Congress approved March 3, 1891, and ordered to be paid in 25 equal annual installments..... 13,771.39

Expenditures from July 1, 1890, to June 30, 1891, inclusive:

Salaries..... *36,791.97

Contingent expenses..... †2,558.35

Funds:

Water rents.....	\$1,266.46
Water-main taxes.....	13.52
	<u>1,279.98</u>

Extra clerical services making new water-rent books on account of 1892..... 462.00

Pumping expenses and pipe distribution..... †64,918.79

Interest and sinking fund on account of increasing water supply..... 71,164.21

Interest and sinking fund on account of water-stock bonds..... 44,610.00

Total interest and sinking fund..... 115,774.21

Interest and sinking fund on account of increasing water supply:

Interest.....	\$26,227.87
Sinking fund.....	43,763.26

Total expenditures..... 221,785.80

Water tax levied during the year..... 67,582.52

Water-tax arrears June 30, 1891—amount collectible..... 54,559.72

Total amount standing to the credit of water fund June 30, 1891..... 177,362.09

* Of this amount \$189 was paid pipe inspectors on account of 1892.

† Of this amount \$23.24 was paid on account of 1887, \$16.25 on account of 1888, \$16.25 on account of 1889, and \$428.79 on account of 1890.

‡ Of this amount \$5 was paid on account of 1887 and \$3,985.19 on account of 1890. The balance was not advanced to Treasurer of United States until after the close of the year and is not included in expenditures.

Organization of and estimates for the water department for the fiscal year 1892.

For revenue and inspection branch:	
For one chief clerk	\$1,800.00
Two clerks, at \$1,400 each	2,800.00
One clerk, at \$1,200	1,200.00
One clerk, at \$1,000	1,000.00
One (chief) inspector, at \$1,200	1,200.00
Seven inspectors, at \$900 each	6,300.00
One messenger	600.00
	14,900.00
For distribution branch:	
One superintendent	2,000.00
One assistant engineer	1,800.00
One draughtsman	1,500.00
One rodman	780.00
One axman	650.00
One foreman	1,400.00
Two assistant foremen, \$900 each	1,800.00
One clerk	1,400.00
One clerk	1,200.00
One timekeeper	900.00
One inspector	900.00
One tapper and machinist	900.00
One assistant tapper	600.00
Four steam engineers, at \$1,100 each	4,400.00
Extra steam engineers' services	540.00
One blacksmith	750.00
Two plumbers, at \$750 each	1,500.00
Two assistant machinists, at \$750 each	1,500.00
Two property keepers, \$936 each	1,872.00
Six firemen, at \$730 each	4,380.00
Two flushers, at \$540 each	1,080.00
One calker	730.00
Three laborers, \$500 each	1,500.00
One driver	480.00
One watchman	480.00
One hostler	480.00
Two inspectors on the manufacture of cast-iron water pipe	2,000.00
Total for salaries	37,522.00
For contingent expenses	3,000.00
Pumping expenses	\$12,000.00
Repairs and maintenance	16,000.00
Fire and street hydrants	16,000.00
Service mains	56,000.00
	100,000.00
Interest and sinking fund water stock bonds	44,610.00
Sinking fund on account of increasing the water supply	54,021.80
Interest on account of increasing the water supply	29,171.77
Interest 48-inch and Fourteenth street mains	8,877.38
Sinking fund 48-inch and Fourteenth street mains	11,836.51
Total	303,939.46

The above estimates aggregate about the same as those submitted last year, but do not include any provision for establishing a new high-service system, the amount available for which will be dependent upon the revenues for 1892 and 1893.

The proposed increase of force is absolutely necessary for the work of the department, which is rapidly growing, the long extensions into the suburbs especially adding to the burden of maintaining the distribution system. The latter must soon be divided into districts, each with its assistant foreman, and depot of material for repairs.

The following tables—3 and 4—show the cost of mains laid during 1891 and the total cost of all mains laid since 1879:

TABLE 3.—Statement showing the cost of water mains laid during the fiscal year 1890-'91 and the assessment levied therefor.

Streets.	Streets between—	Size.	Length.	Cost of material.	Cost of labor.	Total cost.	Amount of assessment.	Excess of cost over assessment.	Excess of assessment over cost.
Center alley	Seventh and Eighth and B and C, NE.	3	306	\$85.31	\$65.48	\$150.79	\$112.43	\$56.95	\$44.01
Do.	Sixteenth and Seventeenth and L and M, NW.	3	389	92.34	77.04	169.38	152.16		
Do.	Twenty-fourth and Twenty-fifth and I and K, NW.	3	267	64.40	43.75	108.15			
Do.	Sixth and Seventh and A and B, SE.	3	468	111.24	127.51	238.75	31.25	272.96	
Do.	First and Second and B and C, NE.	3	315	71.37	232.84	304.21			
Do.	North Capitol and L and Pierce, NW.	3	373	90.13	160.36	250.49			
Do.	Fourth and Fifth and N and O, NW.	3	268	61.70	56.81	118.51	18.06	100.45	
Do.	Nineteenth and Twentieth and L and M, NW.	3	795	196.73	92.74	289.47	15.66	273.81	
Do.	T and U and Fourteenth and Fifteenth, NW.	3	789	189.97	93.62	283.59	44.93	238.66	
Do.	B and C and First and Delaware avenue, NE.	3	527	132.51	120.39	252.90			
Do.	Fourteenth and Fifteenth and Rhode Island avenue and P, NW.	3	527	130.94	131.92	262.86	32.61	230.25	
Do.	Twentieth and Twenty-first and K and L, NW.	3	186	81.70	118.66	200.36	61.18	139.18	
Do.	Thirteenth and Fourteenth and S and T, NW.	3	630	164.15	375.91	540.06	173.37	366.69	
Do.	B and C and First and New Jersey avenue, SE.	3	634	173.32	104.23	277.55	135.96	141.55	
Do.	Twenty-first and Twenty-second and H and I, NW.	3	330	71.92	114.86	186.78			
Do.	Twenty-first and Twenty-second and G and H, NW.	3	473	125.04	128.25	253.29			
Do.	Second and Third and K and L, NE.	3	426	125.08	114.11	239.19	176.00	63.19	
Do.	Four and a half and Union and N and O, SW.	3	169	43.73	43.88	87.61			
Do.	Third and Four and a half and C and D, SW.	3	514	119.02	135.83	254.85	136.72	118.13	
Do.	O and P and First and North Capitol, NW.	3	731	176.15	80.01	256.16	874.54		618.88
Do.	G and I and Ninth and Tenth, SE.	3	352	95.40	63.75	159.15			
Do.	K and L and Twenty-first and Twenty-second, NW.	3	161	38.12	29.50	67.62			
Do.	Twentieth and Twenty-first and L and M, NW.	3	429	111.72	280.84	392.56	194.31	198.25	
Do.	Sixth and Seventh and East Capitol and A, SE.	3	391	105.95	259.82	365.77			
Do.	Twenty-first and Twenty-second and K and L, NW.	3	138	30.57	21.75	52.32			
Do.	Thirteenth and Fourteenth and Maryland avenue and F, NE.	4	435	142.07	46.12	188.19	495.49		307.30
Center Union	Four and a half and Sixth and N and O, SW.	4	639	243.26	98.74	342.00	641.62		299.62
West side Ninth.	Westminister and T.	4	810	264.45	109.13	373.58	1,037.64		664.06
Center Westminister	Ninth and Tenth, NW.	4							
M	Twelfth and Trinidad avenue, NE.	6	850	352.40	81.50	433.90	3,041.99		2,608.09
South side V.	Seventeenth to Boundary, NW.	6							
East side Florida avenue	V to Seaton, NW.	6	1,085	533.82	161.75	695.57	1,176.14		480.57
Center Seaton	Boundary and Seventh, NW.								
North and south sides N.	Twenty-first and Twenty-second, NW.								
North and south sides O.	Twenty-first and Twenty-second, NW.	6	2,689	1,198.06	510.97	1,709.03	2,386.51		677.48
West side Twenty-first.	N and O, NW.	6							
North and south sides E.	Eighth and Ninth, NE.	6	575	291.70	91.00	382.70	218.75	163.95	
North and south sides E.	Fourth and Fifth, NE.	6	439	204.73	93.87	298.60			
East side Delaware avenue	I and K, SW.	6	287	136.26	39.62	175.88	94.92	80.96	
West side Fifth.	C and D, SE.	6	465	222.79	82.01	304.80	541.90		237.10
Center Elm	Linden and Harewood, Le Droit Park, NW.	6	405	185.14	50.25	235.39	701.14		465.75
East side Thirteenth	T and U, NW.	6	508	226.73	96.87	323.60	250.00	73.60	

Center Larch	6	348	194.12	90.79	274.91	519.13	.....	244.22
North side Rhode Island ave.	6	428	226.85	120.84	347.69	.....	.....	.....
North and south sides M: north and south sides L; center Robinson.	6	2,364	1,181.55	332.06	1,513.61	807.00	706.61	.....
East and west sides Sixth	6	900	455.98	166.13	612.11	230.59	391.52	.....
North side I	6	681	398.13	98.46	496.59	803.27	.....	306.63
Center alley	3	314	768.01	245.87	1,013.88	2,938.11	.....	1,924.23
North and south sides D and north side Maryland avenue.	6	1,541	348.52	77.13	425.65	2,959.39	.....	2,583.74
South side W	6	551	322.00	128.88	450.88	99.39	351.49	.....
East and west sides Eighth	6	680	256.18	59.51	315.69	.....	.....	.....
South side Florida avenue	6	449	308.40	115.25	423.65	310.51	113.14	.....
East and west sides Tenth	6	621	250.94	173.51	424.45	346.70	77.75	.....
East side Connecticut avenue	6	469	176.82	101.81	278.63	.....	.....	.....
North side L	6	294	780.21	236.25	1,016.46	1,583.65	.....	567.19
Center California, north side E, east side First, Massachusetts av., and west side Second.	6	1,722	295.58	117.63	413.21	21.66	391.55	.....
East and west sides Ninth	6	608	378.02	150.33	528.35	457.96	70.39	.....
North and south sides D	6	830	154.41	105.25	259.66	.....	.....	.....
North side North Carolina ave.	6	250	214.20	44.50	258.70	1,191.15	.....	932.45
East side Fifteenth	6	443	258.14	82.00	340.14	257.06	83.08	.....
West side Fifteenth, west side Tennessee avenue.	6	571	742.76	191.67	934.43	1,202.05	.....	267.58
North and south sides G	6	1,366	430.07	133.25	563.32	523.24	40.08	.....
East and west sides Tenth	6	937	376.13	152.38	528.51	82.28	446.23	.....
North and south sides Massachusetts avenue.	6	702	223.28	62.00	285.28	710.07	.....	424.79
East side Third	6	497	408.54	106.50	515.04	611.85	.....	96.81
North and south sides C	6	770	919.99	254.53	1,174.52	1,089.62	84.92	.....
East and west sides Twenty-sixth.	6	1,661	664.85	165.85	830.72	4,325.75	.....	3,495.03
Center Eighth extended	6	1,422	183.41	175.98	359.39	401.77	.....	42.38
East side New Hampshire ave. and east side Twenty-sixth.	6	341	324.80	141.87	466.67	1,097.06	.....	630.39
Center Grant avenue	6	609	420.68	131.13	551.81	686.20	.....	134.39
East and west sides Sixteenth	6	860	311.82	79.88	391.70	593.08	.....	201.38
Center Acker	6	629	449.87	121.50	571.37	485.34	86.03	.....
East and west sides Eighth	6	877	270.33	87.49	357.82	321.57	36.25	.....
Center Sixth, north side K	6	541	584.77	173.00	757.77	1,970.28	.....	1,212.51
East side Linden, Trumbull NW.	6	1,141	336.64	112.47	449.11	110.54	338.57	.....
North and south sides South Carolina avenue.	6	726	678.13	247.57	925.70	1,898.27	.....	972.57
East and west sides Seventh	6	1,465	966.79	294.75	1,261.54	6,158.30	.....	4,896.76
Center Park	6	1,869	310.98	142.24	453.17	1,060.94	.....	607.77
South side F	6	648	299.04	147.24	446.28	320.11	126.17	.....
East and west sides Ninth	6	637	176.44	101.75	278.19	.....	.....	.....
East side Fifth	6	426	391.80	124.74	516.54	1,275.84	.....	758.70
North side Q, east side Twenty-third.	6	801	.....	.....	.....	.....	.....	.....

TABLE 3.—Statement showing the cost of water mains laid during the fiscal year 1890-'91 and the assessment levied therefor—Continued.

Connection with 20-inch main	Third and G, NE	}	6	162	84.31	29.26	113.57			
	Third and F, NE		6	36	53.48	27.75	81.23			
	Fourteenth and B, SW		6	103	94.68	45.12	139.80			
	East side Nineteenth, with west side Nineteenth NW		6	10	13.36	22.63	35.99			
	Spruce and Linden, NW		6	120	58.12	35.25	93.37			
	Third and R, NW		6	8	45.80	34.47	80.27			
	Thirty-second and N, NW		6	643	474.94	182.11	657.05			
	Florida avenue to Columbia road, NW									
	Fourteenth and Binney, NW		6		65.65	35.00	100.65			
	Fourteenth and Princeton, NW									
Eighteenth	Fourteenth and Bacon, NW	}	6	131						
Total					35,388.01	14,314.64	49,702.65	67,386.75	7,234.25	33,419.86

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Cost of erecting fire hydrants:

Material	\$4,886.21
Labor, including repairs to cuts in improved pavements	754.59

Total..... 5,640.80

Cost of laying mains, intersections, and connections:

Material	\$35,388.01
Labor, including repairs to cuts in improved pavements	14,314.64
	49,702.65

Total..... 55,343.45

Total assessment levied in consequence of laying mains..... 67,386.75

Total cost of laying mains, intersections, and erecting fire hydrants..... 55,343.45

Excess of assessment over cost 12,043.30

TABLE 4.—Statement of the length and cost of water mains laid from July 1, 1878, to June 30, 1891.

Fiscal year.	30-inch.	24-inch.	20-inch.	12-inch.	10-inch.	8-inch.	6-inch.	4-inch.	3-inch.	Total.	Cost.
	<i>Lin. ft.</i>	<i>Lin. ft.</i>	<i>Lin. ft.</i>	<i>Lin. ft.</i>	<i>Lin. ft.</i>	<i>Lin. ft.</i>	<i>Lin. ft.</i>	<i>Lin. ft.</i>	<i>Lin. ft.</i>	<i>Lin. ft.</i>	
1879.....	39½			3,719			12,781	30		16,641½	\$14,846.20
1880.....				7,409			8,546	1,397		17,352	19,436.03
1880.....							*3,024			3,024	
1881.....							3,709			3,709	3,110.70
1882.....							1,920			1,920	1,626.43
1883.....				1,625		26	4,084			5,735	8,073.70
1884.....				1,038			8,972			10,010	10,492.51
1885.....				963			27,766	358	485	29,572	25,865.35
1886.....				1,938	791		35,192		6,623	44,544	40,025.10
1887.....			†4,835	†1,124	†2,998		†30,041	†292	7,124	46,414	56,951.00
1888.....				731			†9,123	†9,148	†3,937	22,939	17,626.63
1889.....		2,312	5,140	5,626	2,784		36,742	6,571	8,753	67,928	79,342.16
1890.....							§34,737	§2,856	2,855	40,448	19,113.54
1891.....				¶5,201			¶56,893	¶3,142	¶11,013	76,249	49,702.65
	39½	2,312	9,975	29,446	6,573	26	273,530	23,794	40,790	386,485½	346,212.00

* Laid on Road street, Georgetown, to replace old cement pipe.

† Cost of laying intersection not included herein.

‡ 1,074 feet to United States Library site, cost not included herein.

§ 12,336 feet laid under permit system, cost not included herein.

¶ 5,576 feet laid under permit system, cost not included herein.

Comparative statement of revenues, actual and estimated.

Fiscal year.	Water rents.	Water taxes.	Taps.	Permits.	Total revenues.
1885.....	\$188,528.20	\$20,578.88	\$3,402.00	\$3,076.09	\$145,585.17
1886.....	124,896.22	36,162.04	5,096.00	3,459.03	169,613.29
1887.....	138,539.49	47,183.24	6,012.00	4,846.45	196,581.18
1888.....	171,892.49	34,264.85	4,182.00	4,809.92	215,149.26
1889.....	189,407.39	46,280.58	5,190.00	5,576.16	246,454.13
1890.....	197,053.34	45,386.55	5,313.72	6,327.95	254,081.56
1891.....	209,664.29	50,322.93	5,640.00	6,869.79	272,497.01
1892 (estimated).....	210,000.00	45,000.00	5,000.00	5,000.00	265,000.00
1893 (estimated).....	215,000.00	47,000.00	5,500.00	7,500.00	275,000.00

Available balance due water fund June 30, 1891..... \$107,370.96

Estimated receipts, 1892..... 265,000.00

Total..... 372,370.96

Estimated expenditures, 1892..... 300,000.00

Estimated available balance to credit of water fund June 30, 1892..... 72,370.96

Estimated revenues fiscal year 1893..... 275,000.00

Estimated total available for 1893..... 347,370.96

HIGH SERVICE.

The area served by both the Washington and Georgetown pumping stations has materially increased since the date of my last report.

The old Knowles engine at the Georgetown station is no longer equal to the work to be done. The Blake engine at the same station is of old pattern and very wasteful of fuel.

The engines at the Washington station can not be utilized to supply much more of the high area than they now serve.

There is a strong demand for a water supply from many suburban localities which can not be reached by gravity. As the development of these higher areas will be greatly retarded unless a water service can be provided, and as the existing plant is quite inadequate to reach them, provision must be made for a high-service system of suitable capacity.

My estimates for the fiscal year 1893 include an item which is intended to provide the means for commencing work on this new high-service system. The necessary land should be secured with the least delay possible, and one pumping engine with the necessary distributing mains put in service. The reserve machinery can be added later. The cost of the complete system will be heavy, but delay will only increase the expense.

It is entirely feasible to construct a high-service distribution system which shall dispense with the necessity of providing steam fire-engine stations over a large part of what is now the suburbs of Washington. This can be accomplished by maintaining pressures at the fire plugs sufficient to allow fires to be put out by hose companies alone.

METERS.

Since my last annual report, the number of meters in service has been increased to a total of 109. The kinds and sizes of these meters are shown below:

Size.	Crown.	Thomson.	Worthington.	Total.
$\frac{1}{2}$ -inch	1	.....	2	3
1-inch	12	4	13	29
$1\frac{1}{2}$ -inch	14	1	13	28
2-inch	8	4	14	26
3-inch	7	.....	12	19
4-inch .....	.....	.....	2	2
6-inch	2	.....	.....	2
Total	44	9	56	109

It is of the highest importance that suitable penalties be established by law against attempts to defraud the District of revenue by tampering with water meters and their connections. At present not the slightest protection is afforded in this direction.

In my annual report for 1889 attention was invited to the need for this legislation, which is more and more urgently demanded as the number of meters in service increases.

PUBLIC PUMPS.

There are now in service in the District 264 public pumps. Two new pumps were erected during the year in wells sunk without expense to

the District; 31 new pumps were set to replace old ones, and 9 wells were filled and abandoned, upon conclusive evidence that the water could no longer be used with safety. Repairs were made to pumps in 363 instances.

The appropriation for this purpose for 1891 was \$5,000, and a like sum should be available for 1893. The public demand for the maintenance of these pumps continues strong, not only on the part of the very poor, who can not afford to pay for Potomac water, but of many others who prefer the taste of the water from the wells, or object to using ice water, and find the Potomac water too warm to be palatable during the summer months.

GAS AND OIL LIGHTING.

Since the commencement of the current fiscal year the gas and oil lamps have been lighted by schedules based upon a minimum of three thousand hours per lamp per annum, or four hundred hours more than has been allowed for a number of years. While the increased period of illumination is in so far a gain to the public, it should be understood that probably in no other respect is Washington so provincial as in the practical dependence on the moon for a considerable part of each year's lighting. It is patent to all who use the streets at night that the result is entirely unsatisfactory, and that, on account of the foliage and the shadows cast by tall buildings, the sidewalks are too dark to be safely used during many hours when they are supposed to be adequately lighted by the moon.

A sufficient remedy can be provided by fixing the minimum period of gas lighting at three thousand seven hundred and fifty hours per lamp per year, instead of three thousand hours as at present. The Washington Gaslight Company is willing to undertake the service at \$25.50 per lamp per annum, an increase of 18.6 per cent in cost, for an addition of 25 per cent to the yearly period of illumination.

During the fiscal year 1891 a count was made of all the lamps in service. This count developed the fact that a shortage of 124 lamps existed in the account of the Washington Gaslight Company. The difference was made good by the company named, to include as far back as the shortage could be traced. The matter is still under examination, with a view to ascertaining the exact origin of the discrepancy.

The following statement shows the expenditures on account of gas and oil lighting for the fiscal year, 1891:

Money statement for street lighting, for the fiscal year ending June 30, 1891.

Appropriation, act August 6, 1890.....	\$125, 000. 00	
Collections for lighting, on account of the Baltimore and Potomac R. R. Co	\$2, 091. 54	
Collections for lighting on account of the Baltimore and Ohio R. R. Co	1, 057. 91	
	<u>3, 149. 45</u>	
Total amount available.....		<u>128, 149. 45</u>

DISBURSEMENTS.

For street lighting:		
Washington Gaslight Co.....	\$100, 613. 87	
Georgetown Gaslight Co	8, 228. 90	
Wheeler Reflector and Light Co	7, 939. 15	
	<u>\$116, 781. 92</u>	

For erection and moving of lamps:

Washington Gaslight Co	\$3, 275. 13	
Georgetown Gaslight Co	400. 45	
Wheeler Reflector and Light Co	8. 00	
Pay roll, erection of lamps	91. 00	
		<u>\$3, 774. 58</u>

For the purchase of lamp-posts, lanterns, and other materials:

Wheeler Reflector and Light Co	2, 674. 50	
J. T. Springmann & Sons	1, 180. 00	
E. P. Gleason Manufacturing Co	35. 88	
H. I. Gregory	272. 60	
George White & Sons	1, 100. 32	
W. L. Cash, for repairs to lanterns	53. 25	
		<u>5, 316. 55</u>

Total disbursements	125, 873. 05
Unexpended balance	2, 276. 40

128, 149. 45

On June 30, 1891, there were in service 5,366 gas lamps and 437 oil lamps.

Prior to July 1, 1891, the gas companies, in accordance with law, equipped the street lamps with self-regulating burners. The performance of these burners was very satisfactory for a time, but recent experience shows that they are quite liable to clogging with some of the products of gas manufacture. The difficulty can probably be overcome by systematic cleaning.

ELECTRIC LIGHTING.

During the fiscal year 1891 the number of public arc lights was increased from 195 to 242. The service was satisfactorily maintained. Between April 1 and June 30, 1891, the contractors, the United States Electric Lighting Company, in order to light the whole of Fourteenth street NW., between H street and Florida avenue, maintained a number of public arc lamps without charge to the District.

There is a demand for a considerable extension of the arc-lighting service. In my opinion, the locality most deserving such extension in the near future is H street N., between Seventh street W. and Fifteenth street E. My estimates for the fiscal year 1893 contemplate this extension.

The following statement shows the expenditures for electric lighting during the fiscal year 1891:

Money statement for electric street lighting for the fiscal year ending June 30, 1891.

Appropriation, act August 6, 1890	<u>\$46, 000. 00</u>
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DISBURSEMENTS.

For street lighting:

The United States Electric Lighting Co	\$45, 611. 50
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For inspection:

Pay roll of employés	286. 00
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For purchase of materials:

American Meter Co	102. 50
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Total disbursements	<u>46, 000. 00</u>
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SEWERS.

The sewerage of the District is rapidly approximating a condition which will demand heroic treatment. The low areas subject to overflow during extended freshets in the Potomac are served by sewers which have not, and can not have, natural grades sufficient to properly drain the neighboring territory or to make the sewers themselves self-cleaning. The accumulation of deposits in the James Creek Canal and the Tiber, Missouri-avenue, and B-street sewers is a constant menace to much valuable property and a source of heavy annual expense for its removal. The territory adjacent to these sewers is rapidly building up, and the residents naturally object to the removal of the deposited material, which is thus yearly becoming a more difficult and expensive matter.

The only sufficient remedy is to provide at once for an adequate system of sewage disposal. An appropriation should be made without delay for commencing those portions of the system which can be operated without the aid of pumps, and the necessary detailed drawings and estimates should be at once prepared for the machinery and appurtenances of the whole system.

Unless full and decisive action be taken in this matter, very serious results may be expected in the near future, both as regards danger to the public health and the flooding of property on a large scale.

My estimates for the fiscal year 1893 contemplate, under the head of main and pipe sewers, the building of the Lower Rock Creek intercepting sewer and portions of the F street and Easby's Point, and Anacostia (right bank) intercepting sewers. Under the appropriation for suburban sewers it is hoped that funds may be provided for completing the Upper Rock Creek (left bank), and the Piney Branch intercepting sewers. The former is needed to preserve Rock Creek from contamination and the latter to afford sewerage for Mount Pleasant and the various subdivisions which drain into Piney Branch.

It would be of great advantage to the city and to the District at large if sufficient funds could be provided in one appropriation to complete the entire system of sewage disposal. The construction would of necessity extend over several years, but a great saving of time and money would be effected if the whole work could proceed from beginning to end without the delays incident to annual appropriations. There is nothing to gain and much to lose by postponing this work, the execution of which will be more and more costly with the crowding up of population and the increase of traffic in the low areas.

The total estimated cost of a satisfactory system of sewage disposal is between \$3,500,000 and \$4,000,000. The City of Mexico is now engaged in expending a like sum upon a single feature of its system of sewerage, the great drainage tunnel.

GAUGING SEWERS AND RAINFALL.

Some interesting and valuable results were obtained by making contemporaneous measurements of rainfall and sewer discharges. The work of observation and computation should go on without interruption for several years. It is recommended that an appropriation of \$2,500 be made for this purpose.

THE SEWER DIVISION.

The establishment of this division on a permanent footing, effected by the act approved March 3, 1891, can not fail to produce excellent re-

sults. An additional field party is needed to make surveys and estimates for extensions and to exercise a close supervision over work of construction. The time has arrived when, in my judgment, the duty of designing and building sewers should be divorced from that of maintaining and repairing them. The effect of the existing arrangement is to burden the superintendent of sewers with a mass of detailed work which does not strictly belong to an engineer, and which grows heavier with the completion of each foot of sewer. This will be especially true if the next Congress provides for the construction of any part of the system of sewage disposal.

CLEANING AND REPAIRING SEWERS AND BASINS.

The appropriation for this purpose for the fiscal year 1891 was \$42,000. The most important pieces of repair work done were portions of the sewer on Fourteenth street NW., between G and K streets, and also portions of the Georgetown main sewer. The repairing of the latter is nearly completed, and it is hoped that, after the current fiscal year, its name may no longer appear in the annual estimates.

Among the other principal items of work done under this appropriation may be mentioned the cleaning of 110,463 lineal feet of pipe sewer, 3,843 lineal feet of brick sewer, 4,671 manholes, and 40,940 receiving basins.

The appropriation for the current fiscal year is \$43,000, and \$45,000 is estimated for as needed for the fiscal year 1893.

REPLACING OBSTRUCTED SEWERS.

The appropriation for this purpose for the fiscal year 1891 was \$26,000. There was replaced under contract a total length of 1,795.4 feet of pipe sewer, varying from 12 to 24 inches in diameter, and by day labor 10,937 feet, varying from 6 to 24 inches in diameter. For the current year the appropriation is \$25,000, and for the fiscal year 1893 a like sum should be appropriated.

MAIN AND PIPE SEWERS.

The appropriation made under this head for 1891 was \$140,000. There were built by contract a total length of 27,715 feet of sewer ranging between 12 inches and 5.5 feet in diameter, 1,496 lineal feet of basin connections, and 49 receiving basins; and by day labor, 3,383 lineal feet of sewer from 6 to 21 inches in diameter, 30 receiving basins, and 21 manholes.

The work of dredging James Creek Canal, specially authorized in connection with the appropriation for 1891, was well under way at the close of the fiscal year.

Some of the more important lines of sewer brought to completion during the fiscal year were as follows:

Eighteenth street NW., between Virginia and Pennsylvania avenues.

K street NW., between North Capitol and Fourth streets.

Rhode Island avenue NW., between Seventh and Tenth streets.

Fourteenth street NW., between Rhode Island avenue and P street.

First street SE., between D and E streets.

Ninth street SE., between M and O streets.

Reservations 15 and 16.

L street NE., between Florida avenue and Sixth street.

The appropriation for the current fiscal year is \$119,000. For the

year 1893 a much larger sum should be provided. My estimates for that year aggregate \$642,050 for main and pipe sewers, and do not include all the work which should be constructed without further delay.

About the end of the fiscal year 1891 I was led to believe that some of the pipe sewers laid under contract were not as fully surrounded with concrete as required by the specifications. An examination made by digging down to and cutting the sewers in question showed a deficiency of concrete in a few instances. This deficiency is now being made good by the contractor concerned.

SUBURBAN SEWERS.

The appropriation for 1891 was \$75,000. There were built under contract, 18,634.54 lineal feet of sewer varying in size from 12 inches to 8 feet in diameter; 744 lineal feet of basin connections, and 27 receiving basins; and by day labor, 1,348 lineal feet of sewer, varying in diameter from 6 to 24 inches, 12 manholes and 5 receiving basins. Some of the more important lines upon which substantial progress was made are as follows:

-Adams and Jackson streets, Anacostia; Trinidad valley, Eckington valley, Lincoln avenue, Bladensburg road, Fourteenth street, extended; Rock Creek valley (above P street).

The appropriation for the current fiscal year is \$75,000, and estimates have been submitted for 1893, amounting to \$162,800.

PERMIT WORK.

The allotment to the sewer division under this head was \$35,000. There were built under the voluntary permit system, 22,222.85 lineal feet of sewer from 6 inches to 6.5 feet in diameter, 75 receiving basins and 151 manholes, and under the compulsory system 5,197 feet of sewer from 6 inches to 15 inches in diameter, 5 receiving basins and 35 manholes.

In addition there were built from deposits, at the total cost of applicants, 3,228 lineal feet of sewer, from 6 inches to 15 inches in diameter, 2 receiving basins and 17 manholes.

For 1893 an allotment of \$40,000 has been asked for permit work.

PLUMBING REGULATIONS.

The law upon which the existing plumbing regulations are based is quite defective, and until it is amended plumbing work can not be adequately supervised. Considerable progress has been made toward framing a suitable code of regulations, the promulgation of which should follow promptly upon the enactment of the necessary legislation.

UNDERGROUND WIRES.

Under the authority of the appropriation act approved March 3, 1891, the United States Electric Lighting Company has laid about 5 miles of conduit. By the end of the calendar year the Chesapeake and Potomac Telephone Company will have completed about the same length. The conduit used is the square terra cotta tube, embedded in concrete and provided with suitable manholes. The board appointed in 1890 to consider and report upon the subject of electric wires in the District of Columbia has submitted a very interesting report, which is not yet published in detail.

CUTTING THE STREETS.

The construction of underground conduits for telegraph and telephone purposes, and the changes and replacement of sewers and water mains on account of the construction of the cable railway on Fourteenth street and Pennsylvania avenue, has imposed a severe strain upon the sewer division and the water department. The work of the distribution branch of the latter was, for many months, at least doubled on account of this construction.

All the necessary changes have been made without expense to the District, and without any detriment to its public works.

INSPECTOR OF ASPHALTS AND CEMENTS.

Under the direction of this officer there were examined between October 1, 1890, and June 30, 1891, a total of 2,179 samples, of which 572 related to asphalt paving work; 1,605 samples of natural and 381 of Portland cement were tested; and 184 analyses were made of water, ice, sewage, and miscellaneous substances.

It is to be hoped that a laboratory may be provided for this work entirely separate from the District office, where its presence is not only undesirable, but dangerous. It is also necessary that an appropriation be made of sufficient size to fully equip the laboratory for its work.

INSPECTOR OF GAS AND METERS.

Attention is invited to the report of this officer for details concerning tests of the illuminating power and purity of the gas supplied by the two companies.

I concur in the recommendations of the inspector that an additional laboratory be established in the vicinity of the new works of the Washington Gaslight Company, and that an assistant inspector be provided for without further delay.

I forward herewith the annual reports of the superintendent of sewers, the superintendent of the water department, the chief clerk of the water department, the superintendent of lamps, the inspector of gas and meters, and the inspector of asphalt and cements. Reference is invited to these reports for details of the operations in the departments concerned.

Very respectfully,

JAS. L. LUSK,
Captain of Engineers, U. S. A.

Capt. WM. T. ROSSELL,
*Corps of Engineers, U. S. A.,
Engineer Commissioner, D. C.*

310 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

Clerical work performed between July 1, 1890, and July 1, 1891.

	Fiscal year 1890.	Fiscal year 1891.
Communications received, briefed, and recorded in letters-received book.....	5,838	6,376
Indorsements, references, and reports on above.....	29,165	31,880
Letters and orders.....	4,894	5,852
Copies of contracts drawn.....	704	932
Permits—sewer, gas, water, and miscellaneous.....	7,643	5,561
Vouchers and bills prepared and forwarded in triplicate.....	3,802	4,211

Appropriations, expenditures and estimates.

Title of appropriation.	Appropriation, 1891.	Expended, 1891.	Appropriation, 1892.	Estimated, 1893.
Engineer Department:				
Salaries.....	\$41,232.60	\$41,031.44	\$42,250.00	
Salaries, sewer division.....			22,502.00	
Contingent expenses of stables.....	6,000.00	5,931.62	6,000.00	
Water department:				
Salaries.....	37,210.51	36,664.97	40,656.00	
Extra clerical services and numerical book.....			1,225.00	
Pumping expenses and pipe distribution.....	*85,453.83	82,957.80	130,000.00	
Interest and sinking fund on account of water supply.....	84,825.18		84,007.20	
Interest and sinking fund on account of water-stock bonds.....	44,610.00		44,610.00	
Cleaning and repairing sewers and basins.....	†42,000.00	42,050.24	43,000.00	
Replacing obstructed sewers.....	26,000.00	23,675.33	25,000.00	
Main and pipe sewers.....	140,000.00	117,051.88	119,000.00	
Construction of suburban sewers.....	75,000.00	65,644.65	75,000.00	
Gauging sewers and rainfall.....	3,000.00	2,460.61	2,500.00	
Pumps, purchase and repairs to.....	5,000.00	4,775.16	5,000.00	
Improvement of street and avenues.....			400,000.00	
Georgetown section.....	60,000.00	55,059.64		
Northwest section.....	259,000.00	240,180.94		
Southwest section.....	75,000.00	55,897.46		
Southeast section.....	121,500.00	104,863.78		
Northeast section.....	136,700.00	110,843.59		
Grading streets, alleys, and roads.....	20,000.00	18,468.50	20,000.00	
Repairs to concrete pavements.....	120,000.00	120,000.00	150,000.00	
Permit work, for sewers, sidewalks, and alleys (re-payment, \$62,111.97).....	165,000.00	186,604.18	165,000.00	
Permit work for roadways, repayments, \$25,455.43.....	50,000.00	62,152.41	50,000.00	
Current repairs to streets, avenues, and alleys.....	45,000.00	44,959.51	45,000.00	
Current repairs to county roads and suburban streets.....	60,000.00	59,830.37	65,000.00	
Constructing county roads and suburban streets.....	178,950.00	162,654.25	127,000.00	
Condemnation of streets, roads, and alleys.....	5,000.00	1,632.21	10,000.00	
Lighting streets, etc. (repayments, \$3,149.45).....	125,000.00	125,873.05	125,000.00	
Electric lighting of streets.....	46,000.00	46,000.00	59,500.00	
Parking commission.....	18,000.00	17,998.97	19,000.00	
Continuation of survey of the District, with reference to the extension of various avenues to District line.....	7,600.00	6,930.67		
Surveys on account of subdivision of land.....	5,000.00	4,349.12	5,000.00	
Board of examiners steam engineers.....	811.86	811.80	900.00	
Condemnation of rights of way for construction, maintenance, and repairs to sewers.....	10,000.00	3,421.05	8,000.00	
Washington Aqueduct.....	25,500.00		20,000.00	
Construction of brick shed for storing and testing hydraulic cement needed for streets and sewer work.....	2,500.00	2,499.52		

* Reappropriated, unexpended balance, 1890, \$23,453.83; appropriated, 1891, \$62,000; total, \$85,453.83.
† Repayment on account of 1891, \$231.18.

TOPOGRAPHIC SURVEY OF THE DISTRICT OF COLUMBIA.

U. S. COAST AND GEODETIC SURVEY,
Washington, D. C., December 26, 1891.

GENTLEMEN: I have the pleasure of sending you herewith a report on the topographical survey of the District, and regret that a delay has occurred in forwarding it.

Respectfully, yours,

T. C. MENDENHALL,
Superintendent.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA:

The field work of the topographical survey of the District of Columbia having been completed, a brief review supplementing the various annual reports made by the officers of the Coast and Geodetic Survey engaged in this work may be a matter of general interest.

The only topographical map of the District of Columbia extant, offering available data for the municipal authorities upon which to base their preliminary estimates regarding the probable cost of the grading of public streets and highways, was the so-called "Boschke Map," the result of a survey completed as far back as 1855.

This map, however, was defective in many respects, especially in regard to the heights, indicated by hypsometric lines given for every 20 feet difference of level. Among these contours inaccuracies had been discovered, showing discrepancies from 15 to 70 feet, and this map had become altogether inadequate to satisfy the demands for reliable data at this period (1880), when the capital city was in a state of rapid growth. New streets were to be laid out, the directions of old roads were to be rectified, their grades regulated, and suburban building sites had been selected in great numbers. The desirability of locating the avenues and streets of the latter with some reference to (if not in conformity with) the system adopted for the city of Washington was self-evident.

The city was also to be provided with a new system of sewers, and an increased water supply had become an urgent necessity, the original conduit having failed to supply the daily increasing demands of the growing city, and the establishing of a supplementary aqueduct had been taken into consideration. The new plant was to supply the upper city, while the already existing aqueduct was to be utilized exclusively for the low service. For the satisfactory planning of the last two projects alone (drainage and water supply) it was of the greatest importance to have correct information of the topography surrounding the city. It would have become necessary to treat each case of street, sewer, and water-supply improvement unconnectedly and independently, making a survey for each specific project, in order to arrive at a preliminary estimate of the costs in each case. Naturally, such preliminary surveys are more or less imperfect, partly owing to the limited time allowed for the same, partly owing to their circumscribed character, not to mention the manifold chances of personal interests that might interfere with an economical solution of each pending problem. Moreover, if several solutions for one object in view were to be consid-

ered, a survey for every specific case had to be carried out, and the question of a reliable topographical map of the District of Columbia, made under the supervision and direction of a competent authority, had become important.

All this was well known and fully appreciated, and the city of Washington is indebted for the basis upon which the improvements of recent years have been principally founded to the late Capt. C. P. Patterson, Superintendent U. S. Coast and Geodetic Survey, and to the late Maj. W. J. Twining, U. S. Corps of Engineers, Engineer Commissioner, District of Columbia. Through the joint efforts of these gentlemen the urgent necessity of a detailed topographical survey of the District of Columbia on a large scale was brought to the notice of Congress, with the request to have the necessary appropriation made for the beginning of this work, which resulted in securing the first appropriation of \$5,000 for the fiscal year 1880-'81 to defray the expenses for a detailed "topographical survey of the District of Columbia for the extension of streets and avenues."

After numerous consultations regarding the methods and characteristics which were to be adopted for this survey, Messrs. C. P. Patterson and W. J. Twining concluded that the work should be executed under the auspices of the U. S. Coast and Geodetic Survey, this Bureau furnishing all office work, providing the necessary instruments, and detailing such officers from its corps of topographical engineers, under whom the field party or parties were to operate.

The first step taken was the furnishing of as many new triangulation points as the accuracy and expediency of the intended survey required. This (tertiary) triangulation was assigned to Assistants S. C. McCorkle and C. H. Sinclair, who commenced operations in July and finished the field work in November, 1880, giving the determination of 127 points.

As the topographical survey was to be executed in a manner sufficiently detailed to dispense with all preliminary surveys for road improvements, the laying out of suburban villa sites, etc., in the future, a scale of 1.4800 was decided upon for the charts of this work.

In order to obtain results ready for use in the office of the Engineer Commissioner, District of Columbia, as speedily as possible, it had been decided that the survey should be made by means of the plane table and spirit level combined, all details (buildings, ditches, fences, wood lines, roads, etc.) were to be actually laid down upon the field sheets, the contours delineating the topographical relief should be represented by hypsometrical lines with a vertical interval of 5 feet, which were to be determined by leveling instrument, their respective heights indicating their vertical elevations above "mean high tide" of the Potomac River at the navy-yard. The initial bench mark or datum plane, furnished by Assistant Engineer Commissioner Capt. F. V. Greene, U. S. Corps of Engineers, was that placed at the east entrance to the Government Printing Office, it having been used as the official datum plane or plane of reference for all gradients in the city of Washington.

As soon as the field work of the triangulation had been completed Assistant J. W. Donn was directed to take charge of the topographical survey. He has been aided in this work by Assistants W. C. Hodgkins and D. B. Wainwright and Subassistant J. A. Flemer.

The following tabular statement will show the yearly appropriations made for and the area covered by the survey from year to year:

Fiscal year.	Annual appropriation.	No. of parties in field.	Character of work done.	Length of season for each party.
1880-'81	\$5,000	{ 2 { 2	Triangulation Topography	{ July to November, 1880. { February to June, 1881. { April to June, 1881.
1881-'82	5,000	1	do	July, 1881, to June, 1882.
1882-'83	5,000	1	do	July, 1882, to June, 1883.
1883-'84	* 5,000	{ 1 { 1	Triangulation Topography	End of March to April 19, 1884. July, 1883, to June, 1884.
1884-'85	† 5,000	1	do	{ July, 1884, to March, 1885. { June 23 to June 30, 1885.
1885-'86	5,000	1	do	{ July, 1885, to August, 1885. { September 15, 1885, to June, 1886.
1886-'87	4,000	1	Topography	July, 1886, to May 9, 1887.
1887-'88	4,000	{ 1 { 1	Triangulation and topography .. Topography	{ July, 1887, to February, 1888. { July, 1887, to December 13, 1887.
		{ 1	do	{ September 1, 1888, to June, 1889.
1888-'89	10,000	{ 1 { 1 { 1	do ..........do Leveling and topography	{ Do. { Do. { July 6, 1888, to August, 1888.
1889-'90	10,000	{ 1 { 1 { 1	do ..........do ..........do	
1890-'91	7,000	{ 1 { 1 { 1	do ..........do Triangulation and topography ..	

*\$250 were expended for publishing Capt. F. V. Greene's new map of the District.

†\$750 were expended for publishing Capt. F. V. Greene's map of the District of Columbia. From sales of copies of this map \$250 were returned, reducing the charge upon the appropriation to \$500.

The present area of the District outside of the corporation limits of the cities of Washington and Georgetown, including the Potomac River above the Aqueduct Bridge and the Eastern Branch above the Baltimore and Potomac Railroad bridge, is 49.88 square miles (statute); area of the two cities is 8.75 square miles. Original District contained 100.6 square miles.

The first three projections made for the survey were upon full-sized antiquarian sheets, each covering about 8 square miles. It was found, however, that these large sheets led to bad results, inasmuch as they were kept in the field too long and suffered deterioration from vicissitudes of climate and general wear and tear. Mr. J. W. Donn suggested the use of smaller sheets, thus shortening the time of exposure in the field and making more rapid returns of data for publication. This suggestion having met with favor, thereafter the smaller projections were used.

After projection No. 1 had been completed Maj. Twining requested that preparations be made for the publication of results. Dividing this sheet into six equal parts (rectangular sections), he directed the employment of an expert draftsman to copy them in a manner suitable for photolithographic reproduction. The marginal lines thus laid down on this sheet became the fundamental lines of demarcation for all sectional drawings which have been made for furnishing the engineer department of the District with photolithographic copies. This system appears somewhat arbitrary now, as the area of the survey has thus been divided into fifty-eight sections, thirty of which are only full sections (in shape and size like the original six of sheet No. 1) while twenty-eight are fractional ones, varying from 0.43 to 0.45 of one full section, the equivalent of the entire fifty-eight sections in actual work amounting to forty-two and one-half sections.

The leveling operations of this survey have been conducted with great care and accuracy, checked lines of levels were run along roads,

railroads, and streams, thus locating reliable bench marks upon which the elevations of the contour lines are based. The practical value of these bench marks is obvious, as they will prove very valuable for the future use of the intricate and minute contour work shown upon the field sheets, also when the time arrives for extending streets and avenues from the city far into the District, for laying out parks, etc.

However, during the years of this survey, it has been found that many of these bench marks are fast disappearing, owing to their obliteration by vandalism and accidents. In order to obtain and preserve a number of permanent bench marks, it has been decided by Maj. Charles W. Raymond, U. S. Army, Corps of Engineers, Engineer Commissioner, District of Columbia, to set a number of granite blocks in the localities of such bench marks as were found to have remained unchanged but which probably would be lost in the near future by the extension of streets, laying out of subdivisions, etc. These granite blocks are 3 feet long and 4 to 6 inches square at the top; they have subsurface marks, are numbered in consecutive order, and are properly described and designated in the original records of the survey. Almost two hundred of such permanent bench marks have been erected, and a large number of other permanent bench marks, not designated by number, may be found among the original level records.

The following table, made up from the journals of the first seven years of the survey (under Mr. J. W. Donn), show the mean number of actual working days for that period in each month of the year:

Month.	Days.	Month.	Days.	Month.	Days.
January.....	16.6	May.....	20.5	September.....	23.4
February.....	19.3	June.....	23.6	October.....	22.4
March.....	17.3	July.....	23.6	November.....	21.9
April.....	21.4	August.....	24.3	December.....	20.0

At the request of the assistant engineer commissioner a resurvey of the shore line of the river was made, extending on the north side from the Aqueduct Bridge to the navy-yard, and on the south side to Alexandria. This resurvey included the shores of the unclaimed flats. Below Analostan Island an exact delineation could not be made. The difference of a few inches in the height of high water made a great change in the appearance of the shore, and the work of reclamation still going on had not yet been sufficiently advanced to permit a proper determination of the bulkhead.

Opening avenues and streets and extensive grading and leveling have changed many localities, so that our topographical delineations do not represent them. Many subdivisions have been made. Columbia Heights and Washington Heights were in embryo, Woodley was but a name, and Kalorama and Petworth had not been thought of when the survey passed over their localities. The avenues as extended, the new public roads and parks had no place in the survey. In 1880 the only subdivisions within the District were Uniontown, Meridian Hill, Pleasant Plain, Mount Pleasant, the additions to Georgetown and Reno. After the resurvey of the river shore between the Aqueduct and Long Bridge a day was given to the site of the new reservoir, making a survey to replace the old.

As a further contribution to this report, the distances between the stones (mile) along the northeast boundary of the District, all of which were located upon the plane table sheets, were measured. The average

distance between the stones from the north corner to the fifth is about 5,310 feet. The sixth stone is 5,490 feet from the fifth and 5,140.5 from the seventh, but alignment is correct. From the inscription upon it it appears that it was purposely placed 165 feet southeast of its proper position. According to plane-table determinations the average excess of distance over a mile between the stones is 30 feet. Computations by Assistant Schott make the distance between the north and east corners 10 miles 289+ feet.

REPORT OF THE SUPERINTENDENT OF STREETS.

OFFICE OF THE SUPERINTENDENT OF STREETS,
Washington, D. C., August 17, 1891.

COLONEL: I have the honor to submit the following report of the operations of this office for the fiscal year ending June 30, 1891.

The appropriation for current repairs to streets, alleys, and avenues was \$45,000, of which amount \$44,953.31 was expended; balance, \$46.69. (See statement marked A.)

A.—Work done under appropriation for current repairs to streets, avenues, and alleys from July 1, 1890, to June 30, 1891.

Grading	cubic yards..	2, 996
Flag laid	linear feet..	17, 049
Curb set	do.....	2, 931
Curb reset	do.....	16, 142
Cobble paved	square yards..	40, 823
Brick paved	do.....	20, 118
Asphalt tile paved	do.....	250
Granite block paved	do.....	19, 041
Vitrified brick paved	do.....	2, 512
Macadam	loads..	1, 024
Sheet asphalt	square yards..	13
Drain cleaned	linear feet..	763
Material		
Labor		\$9, 227. 46
Miscellaneous labor		27, 698. 11
Foremen's labor		4, 594. 42
		3, 433. 32
Total cost		44, 953. 31

The act of Congress approved August 6, 1890, appropriates \$165,000 for permit work, \$130,000 of which was allotted to the street department. The act provides "that under the permit system, the property owners requesting such improvements shall pay one-half the total cost." The expenditures under such provision were \$31,984.02, as shown by statement marked B.

B—Summary of permit work ordered and completed from July 1, 1890, to June 30, 1891.

No.	For whom done.	Grading. Cu. yds.	Asphalt block.	Asphalt tile.	Brick. Sq. yds.	Vitrified brick. Sq. yds.	Cobble. Sq. yds.	Granite block. Sq. yds.	Curb. Lin. ft.	Flag. Lin. ft.	Cranford grano- lithic. Sq. yds.	McLaugh- lin grano- lithic. Sq. yds.	McLaugh- lin Schil- linger. Sq. yds.	Drew. Sq. yds.	Sheet. Sq. yds.	Amount.
1	Littlefield & Alvord				95											\$70.27
2	H. L. Rust	18			44		13		40							85.56
3	Geo. E. Emmons	168			379		332									848.14
4	A. A. Lipscomb	4,093			852		861		32	106						1,108.55
5	T. F. Schnieder	259			462				529							1,929.78
6	Jno. E. Beall				1,555											1,030.76
7	Jno. A. Prescott				81											58.11
8	Mrs. Iseman				53				30							40.86
9	A. Fisher												26			94.39
10	H. L. Rust				35		14		40							42.14
11	R. O. Holtzman			2												4.79
12	Geo. F. Harbin			186	91				20							358.46
13	R. Willis				35				15							24.60
14	T. W. Grimes			28					20	28						48.00
15	A. B. Mullet	600					254									405.89
16	G. Smith				241				15							161.05
17	R. M. Burn			84												123.48
18	A. M. Proctor				35		2		38							34.60
19	B. H. Warner				300				30							151.86
20	T. F. Mayer			87	3											173.08
21	Geo. E. Emmons	241	632													1,565.42
22	A. P. Clark								17					88		174.18
23	Wescott & Wilcox				66											38.35
24	J. W. Greer								30				19			45.71
25	Britton & Bell				800				158						890	1,553.21
26	Tyler & Rutherford	25		185												315.62
27	J. T. Bradford															51.84
28	Benj. Beall							10	7				22			372.51
29	A. Adler				330								158			182.02
30	Diendonne & Britwell	100			556											574.17
31	R. G. Campbell								733			27				71.73
32	C. B. Johnson													53		55.66
33	F. Fendall				289				27							70.58
34	J. C. Davidson	15			72		16		76	68						88.20
35	Wash. Danenhower	172			301		77		233	233						256.13
36	E. F. Riggs															685.95
37	C. C. Glover												197			263.43
38	D. B. Groff	200			383	27	8		52				95			298.38
39	M. Church								25							23.36
40	T. F. Schnieder	540			972		81		765	245						1,316.09
41	J. A. Healy			312												454.32
42	Gen. R. Saxton								48				197			427.46
43	J. S. Poole													25		49.79

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

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[illegible]

B.—Summary of permit work ordered and completed from July 1, 1890, to June 30, 1891—Continued.

No.	For whom done.	Grading. Cu. yds.	Asphalt block. Sq. yds.	Asphalt tile. Sq. yds.	Brick. Sq. yds.	Vitrified brick. Sq. yds.	Cobble. Sq. yds.	Granite block. Sq. yds.	Curb. Lin. ft.	Flag. Lin. ft.	Cranford gran- olithic. Sq. yds.	McLaugh- lin grano- litic. Sq. yds.	McLaugh- lin Schil- linger. Sq. yds.	Drew. Sq. yds.	Sheet. Sq. yds.	Amount.
102	Geo. E. Emmons.....						16						118			\$352.40
103	Frank Schwarz.....		130													250.56
104	M. F. Morris.....															194.90
105	P. J. Murphy.....															65.35
106	Jacob Jones.....	218			400		3									320.74
107	George Zurhorst.....															50.68
108	B. H. Warner.....												22			851.63
109	E. Jackson.....								213		268					197.86
110	F. G. Ankam.....												92			93.30
111	C. Edmondston.....													50		252.86
112	W. B. Webb.....				58						120					19.31
113	R. Kauffman.....															79.87
114	Thomas Adams.....															104.94
115	M. Kauffman.....								32							75.75
116	George Glaab.....												36			297.96
117	J. R. McLean.....	100	40	434					22 376					148		1,416.87
Total		7,716	1,015	1,416	10,307	738	1,677	10	6,790	680	917	264	3,002.54	383	1,075	31,984.02

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 319

The act also provides:

That the Commissioners of the District of Columbia are authorized, in their discretion, to order such of the above enumerated work as, in their opinion, is necessary for the public health, safety, or comfort, and to pay the total cost of such work from said appropriation; one-half the cost of such work so done, including material and labor, shall be charged against and become a lien upon the property abutting upon the line of such improvements, etc.

Under this provision the expenditures have been \$109,214.75, as shown by statement marked C.

C.

No.	Location.	Grading.	Asphalt block.	Asphalt tile.	Brick.	Vitrified brick.	Cobble.	Granite block.	Curb.	Schiffinger.	Total cost.
		Cu. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Lin. ft.	Sq. yds.	
1	Alley, square 917.....	312			357				24		\$680.04
3	Alley, Seventh, between Virginia avenue and Water SW				10						3,222.36
4	Sidewalk, Fourteenth, north of H				594				24		241.33
5	Sidewalk, Nineteenth, from Pennsylvania avenue to H	10			198						137.63
6	Sidewalk, Twenty-second, from Pennsylvania avenue to H street	88			1,566				1,200		580.30
7	Alley, square 194	420	559						20		1,392.87
8	Alley, square 553	200	379						10		836.72
9	Alley, square 206	830	1,052						20		2,908.36
10	Alley, square 183		3,219								8,058.89
11	Alley, rear 1221 Connecticut avenue	175	215								575.79
12	Alley, between Chapin and Stoughton streets	949				66	1,189				940.95
13	Sidewalk, Seventh, between Pennsylvania and Florida avenues				2,295				22		1,095.27
14	Alley, square 501	1,600	2,100						16		5,273.88
15	Sidewalk, D, between Sixth and Tenth SW	208			3,112						1,078.28
16	Sidewalk from K to L and M to O			4,352					240		5,576.33
17	Sidewalk, Thirteen-and-a-half street, from B to Water SW				2,472						783.93
18	Alley, square 238		3,650								9,024.52
19	Alley, square 541					2,103					3,706.38
20	Alley, square 190		907								2,322.37
21	Alley, square 192	430	1,512						30		4,072.67
22	Alley, square 190		1,036								2,653.97
23	Alley, square 214	390	361								995.87
24	Alley, square 102		157								393.41
25	Sidewalk, 804 F street SW				360				235		116.44
26	Sidewalk, Q, between Nineteenth and Connecticut avenue				205				179		202.31
27	Sidewalk, P, between Rock Creek bridge and Thirty-fourth				2,530				18		1,110.63
28	Alley, square 859	580	1,881								4,534.02
29	Alley, square 362	1,000	1,100						84		2,828.71
30	Alley, square 774	600	445						97		1,383.69
31	Alley, square 177	200	628								1,739.36
32	Alley, square 841	12	258								646.12
33	Alley, square 587	862	1,700								3,830.03
34	Sidewalk, Tenth and Rhode Island ave. NW				330				21		84.34
35	Sidewalk, Seventh, from Pennsylvania avenue to H NW			1,190				10	40		1,738.12
36	Sidewalk, Q, between Nineteenth and Connecticut avenue				108				10		100.46
38	Sidewalk, 317 Seventh NW								4	28	64.24

C—Continued.

No.	Location.	Grading.	Asphalt block.	Asphalt tile.	Brick.	Vitrified brick.	Cobble.	Granite block.	Curb.	Schillinger.	Total cost.
		<i>Cu. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Lin. ft.</i>	<i>Sq. yds.</i>	
39	Sidewalk, K, between New Jersey avenue and First street SE.....	90			157						\$120.61
40	Sidewalk, Four-and-a-half, between H and Maryland avenue SW.....				526						550.35
41	Alley, square 237.....	98	971						81		2,422.66
42	Alley, square 856.....		264								732.50
43	Alley, square 410.....	260	279						24		771.51
44	Sidewalk, Ninth, from Pennsylvania avenue to New York avenue NW.....			1,516							2,517.08
45	Sidewalk, Pennsylvania avenue, between Tenth and Eleventh NW.....			458							693.95
46	Sidewalk, Thirty-second, from N to 1249 Thirty-second.....				281						188.62
48	Sidewalk, Rhode Island avenue, between Columbia and Tenth.....				100						92.51
49	Sidewalk, Twenty-first, between H and I.....	38			750				600		326.27
50	Sidewalk, C street, between Third and Fourth NE.....	5			444						198.18
51	Sidewalk, from Mill to Thirty second NW.....				4,377						2,280.39
52	Sidewalk, H, between Twenty-second and Twenty-third NW.....				598				449		311.20
55	Sidewalk, Sixth, between Pennsylvania avenue and B.....				98						89.13
56	Sidewalk, Ninth, from H to New York avenue NW.....		1,105								1,727.20
57	Alley, square 1018.....	790				1,735					2,937.92
58	Alley, square 191.....	35	856						99		2,241.74
59	Sidewalk, Pennsylvania avenue, between Seventeenth and Eighteenth NW.....				1,214						541.61
60	Sidewalk, Fourteenth, from Sampson to alley between P and Q.....				230						143.54
61	Sidewalk, east front square 61, west front 62.....	73			877						409.29
62	Sidewalk, M street, Rock Creek Bridge to Thirty-second.....				3,828						1,645.21
63	Sidewalk, Fourth, between Maryland avenue and East Capitol NE.....				1,894				7		538.49
64	Sidewalk, H, between North Capitol and First NE.....				775						412.06
66	Sidewalk, Second, from B to East Capitol NE.....				1,372						387.64
67	Sidewalk, Covington, between Ninth, Tenth, Rhode Island avenue, R.....				286						172.64
68	Sidewalk, square 74, west side Thirty-second, square 86, east side Thirty-second.....				363						301.14
69	Sidewalk, R street, between Eighteenth and Nineteenth NW.....				207						164.87
70	Sidewalk, front 1424 New York avenue.....				62				12		38.50

C—Continued.

No.	Location.	Grading.	Asphalt block.	Asphalt tile.	Brick.	Vitrified brick.	Cobble.	Granite block.	Curb.	Schillinger.	Total cost.
		<i>Cu. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Lin. ft.</i>	<i>Sq. yds.</i>	
71	Sidewalk, New Jersey avenue, between K and M SE				906				16		\$321.00
72	Sidewalk, A street, between Fourth and Sixth NE	56			2,052						586.64
73	Sidewalk, Twelfth, between E and F NW			887				12			1,407.25
74	Sidewalk, New Hampshire avenue, between Twenty-second and M NW			598					150		1,052.49
75	Alley, square 545						2,008				1,046.14
76	Sidewalk, New Hampshire avenue, between Twenty-first and N			590							1,061.51
77	Alley, square 621	164	300								716.61
78	Alley, square 482	42				737					1,311.25
81	Alley, square 445	569				671					1,184.69
82	Alley, square 995	250	1,100								2,659.77
Total.....		11,263	24,929	1,069	45,748	5,312	3,197	22	3,848	28	109,214.75

Table marked D gives the amount of work done for parties ordering the construction of driveways and other pieces of work that were needed for their sole benefit, and not for the use of the general public, which amounts to \$3,290.17.

D.—Work done for parties paying total cost of same from July 1, 1890, to June 30, 1891.

No.	For whom done.	Granite block.	Asphalt tile.	Vitrified brick.	Paving brick.	Curb set.	Flag laid.	Cranford granolithic.	McLaughlin granolithic.	Grading.	Cost.
		<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>L. ft.</i>	<i>L. ft.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>C. yds.</i>	
1	P. H. McLaughlin	21			4	10					\$56.08
2	C. Carroll			8		7					10.66
3	Littlefield & Alvord	58				40					180.93
4	do				53						12.46
5	do				61						33.96
6	George F. Harbin		41								71.71
7	W. B. Moses	168									490.72
8	J. Maury Dove	29								70	67.20
9	T. J. Mayer		5								11.37
10	Wm. N. H. Maack			10		7					12.53
11	Wash. Nailor			12		10					16.99
12	H. W. Blunt				16	8					9.36
13	D. E. Speer			10		8					16.05
14	Barber Asphalt Co			36							71.32
15	Eckington and Soldiers' Home R. R.										986.84
16	Wm. H. West			19		14					33.91
17	J. T. Heard			13		10					23.50
18	Geo. A. Myers			24		14					27.92
19	D. McMenamin	21				14					61.99
20	J. Maury Dove						132				43.54
21	T. B. Kalbfus			8		18					17.99
22	Daniel Johnson			12		8					14.43
23	J. J. Hogan	22			23	12					75.71
24	A. Nailor, jr							217			184.49
25	M. F. Morris								90		36.12

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D.—Work done for parties paying total cost of same, etc.—Continued.

No.	For whom done.	Granite block.	Asphalt tile.	Vitrified brick.	Paving brick.	Curb set.	Flag laid.	Cranford granolithic.	McLaughlin granolithic.	Grading.	Cost.
		Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	L. ft.	L. ft.	Sq. yds.	Sq. yds.	C. yds.	
26	P. J. Murphy								30		\$11.95
27	B. H. Warner							266			225.87
28	F. G. Aukam			13		8					18.60
29	C. Edmondston							120			102.35
30	August Getz & Son										1.38
31	Pabst Brewing Co.			19		14					23.86
32	J. F. Waggaman							192			163.32
33	M. W. Beveridge							84			71.37
34	do							38			32.39
35	R. Kauffman								35		14.18
36	Thos. Adams								45		18.17
37	A. P. Clark, jr.								60		24.16
38	S. C. Ramage								19		7.54
39	E. B. Curtis								18		7.25
	Total	319	82	148	157	202	132	917	297	70	3,290.17

The appropriation for construction and repair of bridges was \$20,000, out of which the street department has expended \$9,633.31, as will be seen by statement marked E.

Work done under appropriation for construction and repair of bridges from July 1, 1890, to June 30, 1891.

	K street NW.	M street NW.	M street SW.	P street NW.	N street SW.	Anacostia.	New free	K street SW.	Miscellaneous.
Labor	\$184.10	\$645.00	\$275.87	\$1,083.89	\$432.18	\$1,213.87	\$40.86	\$1.13	
Material	43.73	329.85	235.62	124.94	344.09	4,368.55		3.43	\$306.60
Total	227.83	974.85	511.49	1,208.83	776.27	5,582.42	40.86	4.56	306.60

ORDINARY CARE OF BRIDGES.

The appropriation for this work amounted to \$5,000. The street department has charge of all bridges within the city limits and has expended \$3,177.38 for wages of bridge keepers, watchmen, laborers, fuel, lights, etc.

The following is a report of the repairs made to cuts in improved pavements during the year July 1, 1890, to June 30, 1891:

Plumber cuts:	
337 sheet asphalt cuts, 1,229.19 square yards, at \$3.	\$3,666.57
110 granite cuts, 588.64 square yards, at \$1.35	794.66
90 asphalt block cuts, 516.81 square yards, at \$1.35	697.70
279 cobble cuts, 1,571.97 square yards, at 45 cents	707.39
36 sheet asphalt cuts repaired without preliminary repairs at an actual cost of	620.29
20 new asphalt blocks, at 7.1 cents	1.41
Total 852 cuts repaired (3,899.61 square yards), at a cost of	6,488.02
Water department:	
146 cuts repaired	1,900.11
Sewer department:	
16 cuts repaired	288.1
Miscellaneous:	
34 cuts repaired	1,386.1

Very respectfully,

H. N. Moss,
Superintendent of Streets.

REPORT OF THE SUPERINTENDENT OF ROADS.

OFFICE OF THE ENGINEER COMMISSIONER, DISTRICT OF COLUMBIA,
Washington, D. C., July 15, 1891.

SIR: I submit herewith a statement of the operations of my department during the fiscal year ending June 30, 1891, together with estimates for fiscal year 1892-'93.

Very respectfully,

GEO. N. BEALE,
Superintendent of Roads.

The ENGINEER COMMISSIONER, DISTRICT OF COLUMBIA.

Expenditures—Repairing county roads and suburban streets, in fiscal year 1890-'91.

Name of road.	Cash expended.	Bills outstanding.	Total expenditure.
CENTRAL SECTION.			
Argyle Mill	\$424.49		\$424.49
Bennings	559.08		559.08
Bladensburg	2,139.52	\$97.50	2,237.02
Brentwood	84.94		84.94
Bunker Hill	1,738.02		1,738.02
Clifton street	282.68		282.68
Columbia road	2,373.42		2,373.42
Fourteenth street road	1,203.89		1,203.89
Grant street	75.25		75.25
Lincoln avenue	1,320.88		1,320.88
Linnaen Hill road	750.11		750.11
Military	112.06		112.06
Mount Olivet	1,976.00	19.17	1,995.17
Ninth street extended	27.00		27.00
Park street	150.89		150.89
Princeton street	8.42		8.42
Queen Chapel road	25.50		25.50
Riggs	149.25		149.25
Rock Creek Church	1,282.85		1,282.85
Sargent	17.00		17.00
Brightwood avenue	4,684.11	42.00	4,726.11
Sixteenth street extended	294.42	35.75	330.17
Sixth street extended	19.63		19.63
Spring street	106.46		106.46
Thirteenth street extended NW	83.20		83.20
Whitney avenue	63.00		63.00
Woodley Lane road	174.62		174.62
Miscellaneous labor	3,908.11		3,908.11
Material for general use	263.56	.75	264.31
Blacksmithing	323.45		323.45
Klingle Ford road	16.63		16.63
Eighth street extended	50.00		50.00
Howard avenue	40.50		40.50
Sherman avenue	5.86		5.86
Kenesaw avenue	230.06		230.06
Ontario avenue	178.06		178.06
Michigan avenue	515.26		515.26
North Capitol street	872.73		872.73
Kalorama avenue	139.67		139.67
Euclid Place	220.21		220.21
Connecticut avenue	291.87		291.87
Seventeenth street extended	13.24		13.24
First street NW. extended	462.21		462.21
Milk House Ford road	6.50		6.50
Twentieth street extended	28.50		28.50
Twelfth street extended NE	868.32		868.32
Randolph street	512.20		512.20
S street extended	2,395.63	8.66	2,404.29
Quarry road	839.26	298.10	1,137.36
Seaton street	804.87		804.87
T street extended	984.81		984.81
Spruce street	20.50		20.50
New Hampshire avenue extended	110.40		110.40
Le Roy place	35.07		35.07
Steuken street	31.00		31.00
Levis' street	224.62	3.50	228.12
Lincoln street	2.62		2.62
Fort street (Brookland)	13.50		13.50
Thirteenth street extended NE	13.50		13.50
Vermillion street	378.11	52.44	430.55
Total	34,927.52	557.87	35,485.39

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Expenditures—Repairing county roads and suburban streets, etc.—Continued

Name of road.	Cash expended.	Bills outstanding.	Total expenditure.
EASTERN SECTION.			
Anacostia road	\$834.58	.....	\$834.58
Adams street	23.08	.....	23.08
Bennings road	753.43	\$37.99	791.42
Bowen	955.42	.....	955.42
Central avenue	133.87	.....	133.87
Fillmore street	15.17	.....	15.17
Giesboro road	780.10	.....	780.10
Good Hope	366.81	.....	366.81
Hamilton	278.62	.....	278.62
Harrison street	546.89	.....	546.89
Jackson street	54.49	.....	54.49
Jefferson street	620.91	.....	620.91
Livingston road	301.03	.....	301.03
Monroe street	55.57	.....	55.57
Morris road	61.25	.....	61.25
Nichols avenue	297.49	.....	297.49
Racecourse road	27.38	.....	27.38
McLain	115.56	.....	115.56
Sheridan avenue	112.00	.....	112.00
Sheriff road	358.30	.....	358.30
Stanton avenue	172.00	.....	172.00
Stephenson avenue	88.12	.....	88.12
Suit road	297.37	.....	297.37
T street	20.00	.....	20.00
Valley street	1.88	.....	1.88
Washington street	53.58	.....	53.58
Wheeler road	180.25	.....	180.25
Walker	223.44	.....	223.44
Miscellaneous labor	971.03	.....	971.03
Material for general use	23.87	12.34	36.21
Blacksmithing	42.40	.....	42.40
Bowen street (Hillsdale)	45.25	.....	45.25
Pleasant street	15.12	.....	15.12
Bridge street	34.37	.....	34.37
Pomeroy street	118.00	.....	118.00
Fort Stanton road	50.25	.....	50.25
Taylor street	29.09	.....	29.09
Pennsylvania avenue extended	820.75	162.00	982.75
Carroll avenue	472.42	.....	472.42
School street	9.25	.....	9.25
Avalon street	52.50	.....	52.50
Total	10,412.89	212.33	10,625.22
WESTERN SECTION.			
Argyle Mill road	690.48	.....	690.48
Brookville	624.11	.....	624.11
Broad branch	1,357.86	.....	1,357.86
Canal	53.31	.....	53.31
Chappell	399.62	.....	399.62
Daniels road	205.62	.....	205.62
Grant	987.60	46.00	1,033.60
Klingbe	873.66	.....	873.66
Loughboro	15.31	.....	15.31
Military	447.74	.....	447.74
Murdock Mill	338.12	.....	338.12
New Cut	32.00	.....	32.00
Pierce Mill	432.14	.....	432.14
Red lane	15.00	.....	15.00
Ridge	3.62	.....	3.62
River	4.75	.....	4.75
Tennallytown	3,886.11	1.20	3,887.31
Tunlaw	123.58	.....	123.58
Woodley lane	839.60	.....	839.60
Old Chain Bridge	579.11	.....	579.11
Miscellaneous labor	1,225.19	.....	1,225.19
Material for general use	439.41	12.15	451.56
Blacksmithing	149.90	.....	149.90
Thirty-ninth street extended	67.11	33.68	100.79
Total	13,790.95	93.03	13,883.98
RECAPITULATION.			
Central section			\$35,485.39
Eastern section			10,625.22
Western section			13,883.98
Total			59,994.59
Amount of appropriation			60,000.00
Total expenditure			59,994.59
Balance			5.41

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 325

Construction and repair of bridges, fiscal year 1890-'91.

Bridges.	Cash expended.	Bills out- standing.	Total ex- penditure.
CENTRAL SECTION.			
First street extended NW	\$550. 60	\$60. 00	\$610. 56
Sargent road	242. 61		242. 61
Queen Chapel road	208. 26		208. 26
Bates road	8. 50		8. 50
Montello subdivision	44. 06		44. 06
Spring street	25. 44		25. 44
Bunker Hill road	314. 50	32. 40	346. 90
Brentwood road	6. 50		6. 50
Pierce Mill road, over Rock Creek	64. 03		64. 03
Klinge road, over Rock Creek	78. 79		78. 79
Military road, over Rock Creek	25. 16		25. 16
Pierce Mill road, over Piney Branch	9. 57		9. 57
Fourteenth street road, over Piney Branch	15. 07		15. 07
Rock Creek Church road		24. 00	24. 00
Miscellaneous	50. 29		50. 29
Total	1, 643. 34	116. 40	1, 759. 74
EASTERN SECTION.			
Bennings Bridge	927. 22	3. 00	930. 22
Pomeroy street	6. 12		6. 12
Bennings road	105. 32	30. 00	135. 32
Anacostia road over Watts Branch	229. 62		229. 62
Giesboro road	11. 50		11. 50
Sheridan avenue	271. 47	18. 00	289. 47
Walker road	50. 20		50. 20
T street	253. 66	18. 00	271. 66
Pennsylvania avenue, over Eastern Branch	10. 00		10. 00
Stanton avenue	5. 81		5. 81
Blacksmithing	4. 25		4. 25
Harrison street	25. 56		25. 56
Livingston road	94. 51		94. 51
Total	1, 995. 24	69. 00	2, 064. 24
WESTERN SECTION.			
Argyle Mill road, over Rock Creek	1, 608. 31	78. 00	1, 686. 31
Murdock Mill road	522. 32	36. 00	558. 32
Klinge road	99. 08		99. 08
Grant road	543. 39		543. 39
Chain Bridge, over Potomac	1, 014. 16	2, 183. 99	3, 198. 15
Miscellaneous	23. 54		23. 54
Blacksmithing	61. 77		61. 77
Tennallytown road	24. 35		24. 35
Broad Branch road	36. 10		36. 10
Chappell road	33. 50		33. 50
Military road, over Broad Branch	179. 88	0. 00	185. 88
Argyle Mill road, over Broad Branch	13. 20		13. 20
Total	4, 159. 60	2, 303. 99	6, 463. 59

RECAPITULATION.

Central section	\$1, 759. 74
Eastern section	2, 064. 24
Western section	6, 463. 59
Total	10, 287. 57

Appropriation, ordinary care of bridges, 1891.

Salary of keepers, fuel, etc.	\$749. 92
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Under head of "Repairing county roads and suburban streets," the principal work done was as follows: Graveling Bladensburg road from Florida avenue northward for a distance of about 1 mile; graveling Bennings road from Florida avenue to the Eastern Branch; graveling Lincoln avenue from Central avenue to Bunker Hill road; graveling Bunker Hill road from Fourth street NE. to a point about one-half mile beyond Brooks Station; macadamizing and graveling Columbia road from Fourteenth to Nineteenth street; graveling Fourteenth street road north of Whitney avenue; grading and macadamizing Mount Olivet road between Bladensburg road and Twelfth street NE.; graveling and laying gutters on Rock Creek Church road; graveling Brightwood avenue north of Rock Creek Church road; graveling Twelfth street extended NE., between Florida avenue and Mount Olivet road;

grading and graveling S street extended; grading, macadamizing, and graveling the Quarry road; grading and graveling Seaton street; grading North Capitol street extended; grading Michigan avenue; grading T street extended; graveling the Anacostia road, Bennings road, east of the Eastern Branch and the Bowen road; grading and macadamizing a portion of the Giesboro road; graveling Good Hope road and Harrison street; grading and laying gutters on Jefferson street; graveling Livingston road, Nichols avenue, Sheriff road, Suit road, Walker road, and Carroll avenue; grading and macadamizing Argyle Mill road west of Rock Creek; graveling Brookville road; widening, macadamizing, and graveling the Broad Branch road; graveling and macadamizing Chappell road; graveling and laying gutters on Grant road; widening Klinge road; grading and graveling Military road east of Broad Branch; macadamizing Murdock Mill road; graveling Pierce Mill road; graveling and general repair and resurfacing with macadam on Tennallytown road, between Georgetown and Tennallytown (a portion of this road, near Tennallytown, which was constructed under contract by Messrs. Atchison & Looney, was repaired at a cost of \$151.50, which amount should be charged to their retain fund); macadamizing and graveling Woodley Lane road; widening Old Chain Bridge road, and grading. The repairs on other roads were such as are required from time to time on account of washes, dangerous holes, etc. Plank sidewalks were laid on following roads: Tennallytown, Grant, Bladensburg, Brightwood avenue, Bunker Hill road, and Columbia road, amounting in all to 5,143 square yards. Brick sidewalks were laid on Columbia road and Kenesaw avenue, amounting to 1,600 square yards. Cobble gutters were paved on various roads, amounting to 3,073.4 square yards.

Under "Construction and repair of bridges," principal work was: A stone culvert, 50 feet long and 4 feet diameter, was constructed on First street NW., between Florida avenue and T street; a stone culvert on Sargent road; two bridges on Queen Chapel road; bridge on Bunker Hill road, east of Queen Chapel road, rebuilt and widened; repairs made to Bennings bridge, replacing defective underpinning and joists; rebuilding bridge on Anacostia road over Watts Branch; rebuilding bridges on Sheridan avenue, T street, and Livingston road; rebuilding abutments and constructing new bridge at Argyle Mill over Rock Creek; building two bridges on Murdock Mill road; building stone culvert on Grant road; repairing Chain Bridge and building a bridge over Broad Branch on the Military road. Repairs made on other bridges were such as are required from time to time in repairing dangerous holes, etc. The principal bridges have been thoroughly painted during the year, and are the following: Chain Bridge, Klinge Ford Bridge, bridge over Rock Creek at Pierce Mill, over Rock Creek at Argyle Mill, over Rock Creek on Military road, over Broad Branch on Argyle Mill road, over Piney Branch on Pierce Mill road, and over Piney Branch on Fourteenth street road, over Watts Branch on Anacostia road, and on Livingston road over Oxen Run. The bridges in the county are now, with a few exceptions, in good condition. The Chain Bridge will need reflooring and a number of new stringers, as much of the present flooring is badly worn and many of the stringers are badly decayed. It is proposed to have the necessary repairs made at an early date under the appropriation for 1892.

Estimates for county roads, etc., for 1892-'93.

Howard street, Columbia Heights, grading and regulating	\$4,000
Yale street, Columbia Heights, grading and regulating	4,000
New Cut road from Foundry Branch to Canal road, grading	5,000
North Capitol street from T street to Soldiers' Home, grading and regulating	20,000
T street from Le Droit Park to Eckington, grading and regulating	5,000
Thirty-second street from Thirty-fourth street to city limits, widening	5,000
Pennsylvania avenue from bridge southward, grading and regulating	15,000
Kenesaw avenue from Sixteenth street to Zoölogical Park, opening	5,000
Michigan avenue, grade and regulate	5,000
First street NW., from Florida avenue northward, grade and regulate	2,500
Illinois avenue, from Brightwood to Soldiers' Home, grading	5,000
New Hampshire avenue, from Brightwood avenue eastward, grading	10,000
Brightwood avenue, paving with granite block on west side	20,000
For current repairs on county roads and suburban streets	75,000
Total	180,500

I would earnestly urge the necessity of widening Thirty-second street extended (Tennallytown road) from junction with Thirty-fourth street to the city limits, as mentioned in the estimates. It appears that the District owns about 20 feet of ground which the property owners along this road have fenced in. So far as can be ascertained the property holders, although they have been in possession of the ground for years, will raise no objection to this improvement, which is much needed, as the tracks of the Georgetown and Tennallytown Railroad now occupy more than half

the roadway on this portion and make driving on the road at times very dangerous. I would recommend that a survey be made to determine the exact boundaries of this road.

Constructing county roads and suburban streets, 1890-'91.

Street.	Nature of work.	Ex- pended.	Out- standing.	Total cost to July 1, 1891.	Appro- pria- tion.	Balance.	Name of contrac- tor.
Nichols avenue.	Paving with granite block.	\$885.21	\$2,778.68	\$3,663.89	\$,7000	\$3,336.11	Andrew Gleeson.
Linden street ..	Grading and paving.	.....	155.76	155.76	5,000	4,844.24	{ M. F. Talty. Barber Asphalt Paving Co. Barber Asphalt Paving Co. Do. Do.
Maple street ...	Paving	9,322.64	154.92	9,477.56	10,000	522.44	
Larch street....	do	4,406.06	.....	4,406.06	5,000	593.94	
Fourteenth street ex- tended.	do	101.05	1,613.02	1,714.07	12,350	10,635.93	
Brightwood avenue from Irving street, north.	do	3,508.85	6,316.91	9,825.76	10,000	174.24	Andrew Gleeson.
Kenesaw and Wallach streets.	Grading and regulating.	7,498.71	1.20	7,499.91	7,500	.09	Thos. H. Lyons.
Howard avenue.	do	1,337.85	29.44	1,367.29	2,000	632.71	M. F. Talty.
Lincoln avenue.	do	9,417.72	129.69	9,547.41	10,000	452.59	Do.
Brightwood avenue from Rock Creek Church Road, north.	do	3,527.00	2,467.50	5,994.50	10,000	4,005.50	Do.
Pennsylvania avenue.	do	1,515.50	226.19	1,741.69	5,000	3,258.31	Thos. H. Lyons.
Nourse Road ...	do .....	.....	.....	.....	2,000	2,000.00	W. H. Mohler.
Bunker Hill Road.	do	1,182.50	2.07	1,184.57	5,000	3,815.43	
Brentwood Road and Pat- terson avenue.	do	5,000.00	.....	5,000.00	5,000	.....	M. F. Talty.
Connecticut avenue ex- tended.	do	2,660.23	12.00	2,672.23	5,000	2,327.77	
R street ex- tended.	Paving	14,573.65	357.09	14,930.74	15,000	69.26	Barber Asphalt Paving Co.
Streets of Tako- ma Park.	Grading and regulating.	9,018.51	227.71	9,246.22	10,000	753.78	Andrew Gleeson.
Anacostia Road	do	31.67	120.00	151.67	10,000	9,848.33	Frawley.
Naylor Road....	do	985.00	.....	985.00	2,500	1,515.00	Andrew Gleeson.
New Cut	do	858.50	.....	858.50	3,000	2,141.50	Thos. H. Lyons.
California avenue.	do	4,973.11	26.80	4,999.91	5,000	.09	M. F. Talty.
Sherman ave...	do .....	.....	.....	.....	5,000	5,000.00	M. F. Talty.
North Capitol street.	do	9,087.86	237.00	9,324.86	10,000	675.14	
First street ex- tended, NW.	do	2,019.23	479.78	2,499.01	2,500	.99	W. F. Collins.
Eighteenth street ex- tended, NW.	do	154.50	4,679.11	4,833.61	7,500	2,666.39	Thos. H. Lyons.
Laurel avenue..	do	276.00	.....	276.00	600	324.00	H. C. Bolden.
Seventeenth street ex- tended.	do	1,749.77	.....	1,749.77	2,000	250.23	M. F. Talty.
Ridge and Loughborough roads.	do	1,276.00	17.30	1,293.30	5,000	3,706.70	Do.
Total.....	.....	95,367.12	20,032.17	115,399.29	178,950	63,550.71	

REPORT OF THE PARKING COMMISSION.

WASHINGTON, D. C., July 31, 1891.

SIR: The Parking Commission has the honor to submit its twenty-first annual report, being for the fiscal year ending June 30, 1891.

The report of the superintendent, Mr. T. Lanham, is herewith submitted. This shows in detail the operations during the fiscal year and the expenditures connected therewith. One of the most urgent essentials at present in regard to the trees of the city is the removal of all trees on the sidewalks except those near the curbing; also of all those in the parking in front of dwellings, except certain exemptions in the widest of the avenues. This should be looked upon as an important sanitary requirement.

In many places throughout the city trees are crowded in the parkings, forming a dense shade around the houses, utterly preventing the healthy admission of the rays of the sun, retarding the contact of cooling breezes, and encouraging fungoid growth, as may be seen on damp walls and overshadowed yards and alleys, and the evil increases yearly as the trees increase in size.

When the systematic planting of trees was first commenced in this city it was foreseen that a crowded condition and excess of shade would result, unless the older trees in parkings and sidewalks were removed; but in most instances where the attempt at removal was made objections on the part of the citizens were so vigorously maintained, that it was abandoned. There was a certain degree of reason for the retention of the old trees, while the newly planted substitutes were too small to supply an appreciable amount of shade; but this reason no longer applies, since the younger trees now afford all the shade desirable for all useful and healthful purposes.

Another evil consequent upon the close proximity of trees, in the narrow parkings especially, is that of the destruction of the symmetrical growth of the trees intended to be permanent; much harm is now visible from this cause.

A further removal of trees is necessary at the corners of many of the streets. The lines of planting have been carried out too near the corners, and the trees therefor are unduly crowded at points where there is a gas lamp, thus interfering with the proper dissemination of light. This condition of trees and lamps is repeated all over the city and calls for immediate remedy.

An appropriation of \$5,000, in addition to the usual appropriation, is suggested as necessary to enable these necessary improvements to be executed.

The Parking Commission regrets that the wiring of trees as a security against casualties proceeds so slowly; but it seems impracticable, with the appropriation granted, to procure the wire.

It is painfully apparent that the protecting wire is badly needed in many sections where trees are being mutilated by horses; and if a special yearly sum, say of \$2,000, could be secured for this exclusive purpose all the more important points could be reached.

The wooden boxes are decayed mostly, having served a good purpose, and the question of renewing or replacing them with wire protectors is in favor of the latter, they being cheaper, more permanent, and altogether more sightly, and neater than the wooden box.

In paving sidewalks, rectangular spaces for trees, at intervals of 25 feet, are left unpaved. It is suggested that the paving be made continuous, because the distances apart vary somewhat, according to the kind of tree to be used; but from 30 to 35 feet is the average, although some modifications of distance are required, so as not to obstruct alley entrances, etc.

As already noted, the report of the superintendent gives details of operations and expenditures, and it is zealously hoped the recommendation made in former reports and now earnestly repeated, viz, that the salary of the superintendent be increased \$200 per annum, receive attention which it eminently deserves.

The superintendent is the chief executive officer of the commission, and his services fully warrant the above consideration.

The assistant superintendent, who keeps all the accounts of the office, and attends to all the minutia of details connected with it, is well entitled to a larger salary, and an increase amounting to \$200 per annum is respectfully asked for this officer.

It may be well to keep in view that these are the only paid officers connected with the Parking Commission.

Respectfully submitted.

W. R. SMITH.
JOHN SAUL.
WILLIAM SAUNDERS.

Col. HENRY M. ROBERT, U. S. A.,
Engineer Commissioner, District of Columbia.

OFFICE OF THE PARKING COMMISSION,
Washington, July 25, 1891.

GENTLEMEN: I have the honor to submit the following statement of work performed under the supervision of this office during the fiscal year ending June 30, 1891:

Two thousand four hundred and forty-one excavations for young trees were made and a corresponding number of trees planted. Of this number 196 of the excavations were made at Fairview Heights.

Seventh street extended and Ontario avenue were paid for by the proprietors on whose property they fronted.

In the subdivision called Bloomingdale 231 excavations were made by the chain gang, and the same planted with young trees by the parking commission.

One hundred and ninety trees were replanted to take the place of those destroyed by storms and accidents of various kinds, making total number of young trees set out during the year 2,631.

In the city proper, the soil used and dirt carted away from excavations usually have to be hauled long distances, and as it is common to haul and shovel about ten cart loads for each tree planted, it makes this part of the work expensive.

Three thousand six hundred and ten seedlings were set out in the nursery, consisting of ten varieties best suited for street planting. These are in excellent condition, and the nursery can be relied on to more than meet the demands likely to be made on it.

Seven hundred and eighty-four old trees were removed from the streets which had become objectionable from various causes, and of these 135 were paid for out of appropriations for improving the streets on which they stood and obstructed.

Eight thousand nine hundred and twelve old wooden tree boxes were removed, hauled to the nursery, assorted, and the soundest portion of said material used in making 2,550 boxes for young trees planted, and a marked improvement in the appearance of the streets from which they were taken is noticeable.

Seventeen thousand three hundred and eighty-eight brick removed from tree spaces were hauled to yard and delivered to the superintendent of streets.

Caterpillars appeared in large numbers in August and June, and while the foliage was much disfigured by them in the first-named month, they were promptly attacked in June, and with the aid of the money obtained from the emergency fund the trees were kept clear of the pests and present a cleanly appearance at this time.

The Negundo trees are always the first to be attacked by caterpillars and such severe pruning has to be done to remove the webs, and this at the very season when they should be least pruned, that it has rendered many of them unsightly and greatly deprived them of their usefulness. I therefore respectfully suggest that the work already commenced of removing and replacing them with other trees be continued as rapidly as money can be spared for such work.

The work of extending the unpaved spaces around impoverished trees and supplying fresh soil has been carried on only to a limited extent because of insufficient money, but wherever it has been done the improvement in the trees is plainly seen by their increased growth, size, and verdure of their leaves; and I recommend that this branch of the work be continued to as great an extent as practicable, as thousands of the trees, especially in the northwest section of the city, need this treatment.

The trimming of the trees, always an expensive item, has been necessarily increased to relieve as far as practicable the dense shade about the lamps and electric lights, and I respectfully recommend that wherever the last-named lights are to be placed, and trees are 35 feet apart or less, that a tree be removed and the light pole set in its place, which it is thought will better serve the purpose than the placing of them between trees so close together as to frequently render necessary the trimming of two trees so severely as to permanently injure both.

The cultivation of young trees the first few years after they are planted on the streets and the keeping of the unpaved spaces about them free from grass and weeds give much work during the spring and early summer months.

The parkings in the centers of avenues and along the curb of streets are usually mowed three times a year; but from the fact that they are not protected by fencing and have not the care of a watchman they never present a satisfactory appearance. The park in front of the Center Market serves as a place of deposit of much foul matter and requires much attention to keep in a cleanly condition.

No wire was purchased during the year for the protection of trees; consequently many trees in exposed localities have suffered from being nibbled by horses.

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Number of trees on streets June 30, 1890, as shown by last report	67,967
Planted during year just ended.....	2,631
Number of trees removed.....	70,598
	784
Number of trees now on streets	69,814
Amount of appropriation.....	\$18,000.00
Amount expended for labor	\$16,325.30
Amount expended for forage, soil, and other materials, repairing tools, etc.....	1,673.67
	17,998.97
Balance unexpended.....	1.03
Total amount expended by parking commission for trimming trees, digging tree holes, and removing trees and paid for from appropriations for improving streets and by individuals and syndicates.....	764.48
Amount obtained from emergency fund for removing caterpillars from trees.....	132.00
Total	896.48

Very respectfully,

TRUEMAN LANHAM,
Superintendent for Parking Commission.

The PARKING COMMISSION, DISTRICT OF COLUMBIA.

REPORT OF THE BOARD OF EXAMINERS OF STEAM ENGINEERS.

WASHINGTON, July 1, 1891.

SIRS: We have the honor to present to you the report of the board of examiners of steam engineers for the year ending June 30, 1891. The following table will show the work as it progressed during each month:

Months.	Meetings held.	Applications received.	Applicants examined.	Applications approved.	Applications not competent.	Applications for renewal.	United States license.	First-class license.	Second-class license.	Third-class license.
1890.										
July	4	11	10	10	1		1	1	1	7
August	4	5	5	5				1	1	3
September	9	9	9	8	1			1	1	6
October	9	16	15	11	5		1		2	8
November	8	12	10	10	2		2	1	3	4
December	8	9	9	6	3			3		3
1891.										
January	9	7	6	7			1	1	2	3
February	8	11	11	8	3			2	2	4
March	9	8	6	6					2	4
April	11	68	29	63	5	37	2	1	11	12
May	10	23	17	21	2	6		1	3	11
June	9	16	15	15	1	1		1	4	9
Total	98	193	142	170	23	44	7	13	32	74

J. A. WILKERSON,
H. BOESCH,
Secretary.

DAN'L JOHNSON,
Examining Board.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REPORT OF THE INSPECTOR OF BOILERS.

WASHINGTON, D. C., July 1, 1891.

GENTLEMEN: I have the honor to make the following report for the fiscal year ending June 30, 1891:

Fee boilers inspected	533
Boilers inspected for District of Columbia	14
Total inspected.....	547
New boilers erected.....	59
Boilers condemned for repairs.....	12
Boilers condemned for new ones.....	5
Legal fees received for inspecting 525 boilers, at \$5 each.....	\$2, 625. 00
Fees still due for inspecting 8 boilers. No fee for District of Columbia work.	
Total fees received.....	\$2, 625. 00
Total expenses for the year.....	937. 15
Balance.....	1, 687. 85
Expense for the year ending June 30, 1892, will estimate	1, 200. 00

I would most respectfully state that the past fiscal year was the most successful since I have been the inspector of steam boilers, and I find steam plants in better condition than ever before.

For bettering the condition of the office I would most respectfully recommend to the honorable Commissioners the following: That an order be issued to all persons owning or using steam boilers within the District of Columbia that they be required to notify the inspector of steam boilers at least five days prior to expiration of certificate of inspection of their boilers. This would give them time to have their boilers in good condition for inspection, and it would also be a great benefit to the inspector in the discharge of his duties.

Respectfully submitted.

J. H. WILKERSON,

Steam Boiler Inspector, District of Columbia.

THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REPORT OF THE SUPERINTENDENT OF SEWERS.

OFFICE OF THE ENGINEER COMMISSIONER,
Washington, D. C., November 10, 1891.

SIR: I have the honor to submit the following report of the operations of the sewer division for the year ending June 30, 1891, and estimates of funds required for the year ending June 30, 1893:

The defective portions of the main sewer on Fourteenth street NW. were removed and reconstructed, and a large amount of work was performed on the Georgetown main sewer, which will be placed in good order throughout by the operations of the present fiscal year. The sewers and basins were kept clean, and a systematic patrol of the trunk sewers was inaugurated. The places for deposit of material collected from catch basins and sewers are becoming fewer year by year, and the distances this material must be hauled are increasing. It will not be long before available dumping grounds within the city limits are exhausted, when it will be necessary to carry it down the river by means of barges.

A large amount of labor was expended in replacing obstructed sewers, a portion under contract and a portion by day labor. It is difficult to so define the work to be done that large extra claims are made impossible if this work is performed under contract, and the experience of the past has proved that this work can be and is more cheaply performed by the day-labor system. The jobs are small and the work is uninviting to contractors. A large amount of this work yet remains to be done, and the sum of \$25,000 will be required for the fiscal year 1892-'93.

A large amount of new work was performed and several sewers were completed. The relieving sewers on Eighteenth street NW. between Virginia and Pennsylvania avenues, K street NW. between North Capitol and Fourth streets, Rhode Island avenue NW. between Seventh and Tenth streets, Fourteenth street NW. between Rhode Island avenue and P street, First street SE. between D and E streets, Ninth street SE.

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between M and O streets, and the upper section of the Fourth street SE. main sewer were all demanded in order that proper outlet capacity should be supplied to sewer areas heretofore insufficiently provided for. In addition the main sewer on L street NE. between Florida avenue and Sixth street, 1,100 feet of the Fourteenth street SE. main sewer, 1,360 feet of the Anacostia main sewer, 452 feet of the Trinidad main sewer, 440 feet of the Eckington main sewer the main sewer on Lincoln avenue NE. between Florida avenue and R street, 622 feet of the main sewer in Bladensburg road, 605 feet of the Fourteenth street extended main sewer, and 1,611 feet of the upper Rock Creek sewage interceptor were constructed.

Advantage was taken of the permit system to construct in the Edgewood subdivision 823 feet of main sewer. In addition to the main sewers, aggregating 15,478 feet in length; 66,855 feet of pipe sewers and 123 receiving basins were constructed.

James Creek Canal was dredged to a central depth of 6 feet below mean low water throughout its length.

The unfavorable working weather during the early portion of the year delayed the work and made it necessary to extend many of the contracts beyond the end of fiscal year.

GAUGING SEWERS AND RAINFALL.

Gauges have been erected and record is being made of rainfall and sewer discharges relatively, and it is hoped that the appropriation asked for the continuance of this work may be granted.

CONDEMNATION OF RIGHT OF WAY TO CONSTRUCT, MAINTAIN, AND REPAIR SEWERS.

The right of way was secured in five cases without cost to the District and in two cases by condemnation. Ten thousand dollars is requested for this purpose for the next fiscal year.

SEWAGE DISPOSAL.

The nuisances caused by the existing method of conveying the sewage of Washington to the river, as well as the constant menace of overflow confronting the owners of property in the low area of the city, have been fully treated of in former reports and are generally understood, and the need for improvements is acquiesced in by all who have considered the subject. The cost of this work, estimated at nearly \$4,000,000, is so great that it can not be performed within a reasonable period of time by doing so much of it each year as the ordinary revenues of the District will allow after other necessary expenditures have been provided for. The drainage works proposed are of sufficient amplitude to serve the future Washington, and it would seem that the payment for benefits enjoyed may be well extended into futurity. The cost is not large when compared with expenditures for similar purposes made by other large cities.

CLEANING AND REPAIRING SEWERS AND BASINS.

Appropriation		\$42,000
Pipe sewers cleaned.....	linear feet..	110,463
Brick sewers cleaned.....	do.....	3,843
Pipe sewers taken up and relaid.....	do.....	549
Brick sewers repaired.....	do.....	750
Man-holes:		
Constructed	number..	17
Repaired.....	do.....	60
Covers replaced on.....	do.....	87
Cleaned	do.....	4,671
Receiving basins:		
Constructed.....	do.....	4
Abandoned	do.....	2
Repaired	do.....	196
Cleaned	do.....	40,940
New covers placed on.....	do.....	24
Minor repairs to sewers	do.....	582
Sand and gravel removed from brick sewers,	cubic yards..	2,176
Sand and gravel removed from pipe sewers.....	do.....	9,141

REPLACING OBSTRUCTED SEWERS.

Appropriation	\$26,000
---------------------	----------

Constructed under contracts.

Size of sewer.	Linear feet constructed.	Name of contractor.	No. of contract.
12 inches	6	J. J. Cudmore	1270
15 inches	1,042.2	do	1270
24 inches	747.2	J. McCandlish	1267

Constructed by day labor.

Size of sewer.	Linear feet constructed.	Size of sewer.	Linear feet constructed.
6 inches.....	18	18 inches.....	1,268
8 inches.....	3	21 inches.....	100
12 inches.....	7,555	24 inches.....	513
15 inches.....	1,380		

MAIN AND PIPE SEWERS.

Appropriation..... \$140,000

Constructed under contracts.

Size of sewer.	Linear feet constructed.	Name of contractor.	No. of contract.
12 inches.....	12,596.4	J. J. Cudmore	1270
15 inches	2,089.8	do	1270
18 inches	1,725.9	do	4270
21 inches.....	1,443.6	do	1270
24 inches.....	989.2	J. McCandlish	1267
2.5 by 3.75 feet	1,053.75	A. Gleeson	1287
3 by 4.5 feet	2,027.9	do	1287
2.75 by 4.125 feet	3,090.95	do	1287
4 by 6 feet.....	1,598	M. F. Talty	1381
5.5 feet, diameter concrete	1,099.5	H. L. Cranford	1383
Basin connections	1,496	P. Maloney.....	1356
Receiving basins	*49	do	1356

*Number constructed.

Constructed by day labor.

Size of sewer.	Linear feet constructed.	Size of sewer.	Linear feet constructed.
6 inches.....	81	18 inches.....	1,391
8 inches.....	294	21 inches.....	502
12 inches.....	902	Receiving basins	*30
15 inches.....	213	Manholes.....	*21

* Number constructed.

CONSTRUCTION OF SUBURBAN SEWERS.

Appropriation..... \$75,000

Constructed under contracts.

Size of sewer.	Linear feet constructed.	Name of contractor.	No. of contract.
12 inches.....	4,088	J. J. Cudmore	1270
15 inches.....	1,503.6	do.....	1270
18 inches.....	1,602.4	do.....	1270
21 inches.....	3,937	do.....	1270
24 inches.....	2,323.2	J. McCandlish.....	1267
2.5 by 3.75 feet.....	694.45	A. Gleeson	1385
2.75 by 4.125 feet.....	604.7	J. McCandlish	1387
Do.....	1,610.9	H. L. Cranford	1382
3.25 by 4.875 feet.....	622.7	J. McCandlish.....	1267
Do.....	1,359.5	A. Gleeson	1386
7.5 feet diameter concrete.....	451.9	J. McCandlish	1387
8 feet diameter concrete	440.19	B. J. Coyle	1389
Basin connections	744	P. Maloney.....	1267
Receiving basins	*27	do.....	1267

* Number constructed.

Constructed by day labor.

Size of sewer.	Linear feet constructed.	Size of sewer.	Linear feet constructed.
6 inches.....	30	21 inches.....	39
8 inches.....	49	24 inches.....	6
12 inches.....	747	Manholes.....	*12
15 inches.....	324	Receiving basins	*5
18 inches.....	153		

* Number constructed.

PERMIT WORK.

Allotment \$35,000

Constructed under permit system.

Size of sewer.	Linear feet constructed.	Size of sewer.	Linear feet constructed.
6 inches.....	33	24 inches	3
8 inches.....	3,130	6.5 feet diameter, constructed	823.35
12 inches.....	16,230.5	Receiving basins constructed.....	*5
15 inches.....	1,922	Manholes, constructed	*151
18 inches.....	81		

*Number.

Cost of the above work to property-owners \$18,079.42
 Cost of the above work to the District of Columbia..... 18,079.39
 Total cost..... 36,158.81
 Amount returned to depositors 2,005.93

Constructed under the compulsory permit system.

Size of sewer.	Linear feet constructed.	Size of sewer.	Linear feet constructed.
6 inches.....	3	15 inches	57
8 inches.....	387	Receiving basins constructed.....	*5
12 inches.....	4,750	Manholes constructed	*35

* Number.

Cost of work under compulsory permit system to property-owners \$3,663.32
 Cost of work under compulsory permit system to the District of Columbia..... 3,663.30
 Total cost of work under compulsory permit system 7,326.62

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 335

Work performed, the whole cost of which was paid by applicants:

Size of sewer.	Linear feet constructed.	Size of sewer.	Linear feet constructed.
6 inches.....	41	15 inches.....	27
8 inches.....	398	Receiving basins constructed.....	*2
12 inches.....	2,762	Manholes constructed.....	*17

* Number.

Total cost..... \$4,232.15
Amount returned to depositors..... 122.95

Estimates for the sewer division for the fiscal year 1892-'93.

Cleaning and repairing sewers and basins..... \$45,000
Replacing obstructed and inefficient sewers..... 25,000
Permit sewers..... 35,000
Gauging sewers and rainfall..... 2,500
Condemnation of rights of way for sewers..... 10,000

Main and pipe sewers:

Main sewer between Easby's Point and Seventeenth street.. \$175,000
Lower Rock Creek intercepting sewer..... 228,000
Eastern Branch intercepting sewer..... 150,000
Extension of sewer on Fourteenth street SE..... 10,000
Relieving sewers on Fifth and B streets SE..... 4,050
Terra-cotta pipe sewers..... 65,000
Receiving basins..... 10,000

642,050

Suburban sewers:

Eckington Valley sewer..... 10,000
Sewer in first district extended with branches on V and W streets..... 20,000
Le Droit Park main sewer..... 11,500
Rock Creek Valley sewer between Woodley road and Piney branch..... 58,500
Piney branch sewer between Rock Creek and Fourteenth street Road..... 22,800
Extension of main Anacostia sewers..... 16,000
Terra-cotta pipe sewers..... 20,000
Receiving basins..... 4,000

162,800

Sewer division salaries:

Superintendent..... 2,400
General inspector..... 1,800
Assistant engineer..... 1,800
2 assistant engineers, at \$1,500 each..... 3,000
Leveler..... 1,400
Draftsman..... 1,200
4 rodmen, at \$780 each..... 3,120
4 axmen, at \$650 each..... 2,600
1 clerk..... 1,200
2 clerks, at \$1,000 each..... 2,000
2 inspectors of property, at \$936 each..... 1,872
2 sewer-tappers, at \$1,000 each..... 2,000
Permit clerk..... 1,200
Assistant permit clerk..... 840

26,432

948,782

Respectfully,

The ENGINEER COMMISSIONER, D. C.

D. E. McComb,
Superintendent of Sewers.

REPORT OF THE SUPERINTENDENT OF LAMPS.

OFFICE OF THE ENGINEER COMMISSIONER,
Washington, D. C., August 31, 1891.

COLONEL: I have the honor to submit the following report of the operations of this office during the year ended June 30, 1891.

The following statements show in detail the receipts and expenditures on account of street lighting, under the respective divisions, as provided for in the appropriation bill:

Receipts and expenditures on account of street-lighting during the fiscal year ended June 30, 1891.

Date.	Receipts.	Amount.	Date.	Expenditures.	Amount.
1890. July 1.	To appropriation.....	\$125,000.00	1891. June 30.	By Washington Gas Light Co., for street lighting to date.....	\$100,518.39
	Baltimore and Potomac R. R. Co., amount refunded.....	2,007.22		Georgetown Gas Light Co., for street-lighting to date.....	8,228.90
	Baltimore and Ohio R. R. Co., amount refunded.....	1,017.50		Wheeler Reflector and Light Co., for street-lighting to date.....	7,590.15
				Washington Gaslight Co., for erecting and moving lamps.....	3,275.13
				Georgetown Gaslight Co., for erecting and moving lamps.....	400.45
				Geo. White & Sons, for purchase of lamp-posts..	1,100.32
				J. T. Springman & Sons, for purchase of lamp-posts.....	1,180.00
				Wheeler Reflector and Light Co., for purchase of lanterns.....	2,674.50
				E. P. Gleason Manufacturing Co., for purchase of lantern.....	35.88
				Pay rolls, erecting posts for oil lamps.....	91.00
				H. I. Gregory, for purchase of street signs....	272.60
				W. L. Cash, repairs, etc..	53.25
				Balance.....	2,604.15
	Total.....	128,024.72		Total.....	128,024.72

Receipts and expenditures on account of electric lighting during the fiscal year ended June 30, 1891.

Receipts.	Amount.	Expenditures.	Amount.
To appropriation.....	\$46,000.00	Disbursements.....	\$45,611.50
		Inspection.....	286.00
		1 photometer.....	102.00
Total.....	46,000.00	Total.....	46,000.00

During the year 536 new lamps were erected, of which 319 were gas, 91 oil, and 126 electric lights. But 36 of the electric lights were started during this fiscal year; the balance were started at the commencement of the current year.

The number of lamps discontinued was 122, of which 108 were gas and 14 oil.

The gas and oil lamps were lighted 2,700 hours, being 100 hours in excess of the requirements of the appropriation bill, but made necessary by the unusually cloudy and rainy weather of the past year.

The electric lights were lighted every night from sunset to sunrise.

Both the Washington and Georgetown gas companies during the past year have equipped the lamps in their respective jurisdictions with improved burners, by which the service has been much benefited.

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 337

The following estimates for the fiscal year ending June 30, 1893, are respectfully submitted:

Maintenance of 321 electric lights.....	\$58,582.50
Necessary expenses of inspection.....	1,000.00
Total for electric lighting	59,582.50
Maintenance of 6,300 gas lamps.....	135,450.00
Maintenance of new gas and oil lamps.....	5,600.00
Maintenance of 437 oil lamps.....	6,817.20
Purchase of 500 lamp posts.....	3,875.00
Purchase of lanterns, painting, etc.....	1,500.00
Total for gas and oil lamps	153,242.20
Estimates for gas and oil lamps.....	153,242.20
Estimates for electric lighting.....	59,582.50
Total for street lighting.....	212,824.70

Very respectfully,

Lieut. Col. H. M. ROBERT,
Engineer Commissioner.

W. H. HARRISON,
Superintendent of Lamps.

REPORT OF THE INSPECTOR OF ASPHALT AND CEMENTS.

WASHINGTON, July 1, 1891.

COLONEL: I have the honor to submit my fifth annual report upon the work of my office, including the time between the first of October, the date of my last report, and the beginning of the fiscal year a period of nine months.

There have been examined and reported upon during this time 2,742 samples, which may be classified as follows:

Asphalt:	
Crude	15
Refined	5
Oiled	266
Coal tar	77
Residuum oils	36
Surface mixtures	170
Sand, crushed stone, limestone, etc	3
	572
Hydraulic cements:	
Natural: brand 12, lots 198, samples.....	1,605
Portland: brand 17, lots 43, samples.....	381
	1,986
Water:	
Wells.....	87
Aqueduct	18
Springs and cisterns	7
Ice	13
Sewage	12
	137
Oils, lubricating	16
Miscellaneous.....	31
	2,742

The expenditure of chemicals and damage to apparatus in connection with this large amount of work has been considerable and as there has been no appropriation especially available for laboratory supplies during the past two years and as but few purchases could be made from the contingent fund of the department the laboratory is now far from being in a state of the highest efficiency. An expenditure of at least \$1,000 will be absolutely necessary another year and I recommend that it be estimated for.

Analyses of well water, 1890-91.

[Results in parts per millions.]

Serial No.	Locality.	Date.	Depth.	Diameter.	Cover.	Bottom.	Flow.	Location.	Trees.	Sewers.	Cleaned.	Exhausted.	Odor.	Color.	Condition.	Total solids.	Nitrogen as free ammonia.					Total.	Nitrogen as albuminoid ammonia.					Nitrogen as—		Oxygen consumed.	Chlorine.	
																	1st dist.	2d dist.	3d dist.	4th dist.	5th dist.		Total.	Nitrites.	Nitrates.							
NORTHWEST SECTION—PASSABLE.																																
3497	1109 New Jersey avenue (H. O., 54.1)	Oct. 7	30	4.5	Driven	Clay	Fast	Sidewalk	Maples	10 feet	No.		Slight	Yellow tinge	Turbid	116	Trace	.0000	.0000			Trace	.0000	.0000	.0000		.0000	Trace	.00	.30	5.0	
3536	11th and M N W	Oct. 14	18	3.5	Stone	Clay	Fast	Sidewalk	Maples	15 feet	Dec. 13.	No.		Yellow tinge	Slightly cloudy	311	.0080	.0000	.0000			Trace	.0020	.0000	.0000		.0020	Trace	.18	.48	57.5	
3718	11th, between F and G streets.	Dec. 16	27	5	Stone	Clay	Fast	Sidewalk	Maples	10 feet	No.			Blue tinge	Clear	180	.1130	Trace	.0000			.0130	.0000	.0000		.0130	Trace	.18	.22	86.0		
3720	Q, between 13th and 14th streets	1891.														216						Trace	.0040	.0000			.0040	Trace	.28	.04	53.0	
3761	34th, between P and Q streets	Jan. 6	26	4	do	Rock	Slow	do	Poplar roots	15 feet	Jan. 1.	Yes		Yellow tinge	Slightly cloudy	634						Trace	.0240	.0100			.0340	Trace	.15	.22	90.5	
3766	17th and K streets	Jan. 13	15	4.5	do	do	do	do	do	do	do	do		do	do	228						Trace	.0040	.0000			.0040	Trace	.15	.04	36.5	
3874	do	Jan. 20	34	4	Wood	Sand	Slow	Sidewalk	Ash	25 feet	Mar. 13.	No.		do	do	227	.0080	.0140	Trace	.0000		Trace	.0240	.0000			.0120	Trace	.05	.36	31.5	
3887	New Jersey ave., between M and N sts.	Mar. 19	34	4	Wood	Sand	Slow	Sidewalk	Ash	25 feet	Mar. 13.	No.		Slight	Slightly cloudy	336	.0140	Trace	.0000			Trace	.0320	.0000			.0320	Trace	.35	.92	52.0	
3851	do	Apr. 7	25	4	Stone	Sand	Fast	Sidewalk	Maples	None	Apr. 13	do		Organic	Clear	340	.0040	.0000	.0000			Trace	.0240	.0000			.0240	Trace	.00	35	1.28	
3852	7th, between G and H streets	Apr. 7	20	4.5	do	do	do	do	do	do	do	do		Slight	do	356	.0200	.0000	.0000			Trace	.0040	.0000			.0140	Trace	.45	.76	128.0	
3865	34th at U street.	Apr. 14	7	20	4	do	do	do	do	do	do	do		do	do	332			.0000			Trace	.0240	.0100	Trace		.0340	Trace	.70	.56	65.5	
3913	do	Apr. 21	24	4	Wood	Sand	do	do	do	do	Apr. 21	No.		do	do	452						Trace	.0240	.0120	Trace		.0340	Trace	.5	.46	61.5	
3801	New Jersey ave., between N and O sts.	Apr. 21	24	4	Wood	Sand	do	do	do	do	Apr. 20.	No.		do	do	452						Trace	.0140	.0000			.0140	Trace	.35	1.04	49.0	
4021	12th, at Florida avenue	May 26	16	4	Wood	Sand	do	do	do	do	May 24	No.		do	do	70						Trace	.0240	.0000			.0240	Trace	.2	.78	34.5	
4022	4th, between P and Q streets	May 26	18	5	Stone	do	Slow	do	do	5 feet	May 25	do		Slight	Blue tinge	122	.0240	.0000				Trace	.0240	.0000			.0240	Trace	.4	.50	32.5	
4122	15th and M streets	Apr. 16	11	4	Gravel	do	do	do	do	do	May 12.	No.		do	do	168	.0320	Trace				Trace	.0140	.0000			.0140	Trace	.4	.50	32.5	
4150	Orphan Asylum (H. O., 570)	June 23	37	3	Stone	Rock	Fast	Sidewalk	Maples	None	June 23	No.		do	do	106						Trace	.0120	.0000			.0120	Trace	.005	.00	14.5	
4154	32d and T streets	June 23	37	3	Stone	Rock	Fast	Sidewalk	Maples	None	June 23	No.		do	do	93						Trace	.0120	.0000			.0120	Trace	.000	1.40	12.5	
Average																											.0240			.62	45.4	
SOUTHWEST SECTION—PASSABLE.																																
3651	714 6th street (H. O., 550)	Nov. 13	18	4	do	Sand	Fast	Sidewalk	Maples	20 feet	Mar. 21	No.		Slight	Yellow tinge	Clear	454					Trace	.0100	.0000			.0100	Trace	.25	.12	124.0	
3828	6th, between M and N streets NW	Mar. 24	18	4	Wood	Sand	Fast	Sidewalk	Maples	20 feet	Mar. 21	No.		Slight	Yellow	Cloudy	460	.0320	.0240	Trace		.0500	.0720	.0160	.0140	Trace	.1020	.000	.8	2.42	117.5	
3931	3d and D streets	May 4	16	4.5	do	do	do	do	Maples	None	May 2.	do		None	Yellow tinge	Slightly cloudy	376	.0080	Trace			.0080	.0240	Trace			.0240	Trace	.8	.50	101.5	
NORTHEAST SECTION—PASSABLE.																																
3538	8th and C streets	Oct. 14	20	5	Stone	Sand	Fast	Sidewalk	Maples	20 feet	No.		Slight	Yellow tinge	Slightly cloudy	324	.0320	.0000			.0320	.0240	.0000			.0240	Trace	.15	.22	82.5		
3680	4th and E streets	Nov. 25	26	5	do	Gravel	Fast	Parking	Maples	15 feet	Nov. 24	No.		do	do	382						Trace	.0320	.0120	.0000			.0440	Trace	.8	.42	79.0
3762	13th and F streets	Jan. 27	22	4.5	Stone	Sand	Fast	Parking	Maples	20 feet	No.		Slight	Yellow tinge	Clear	494	.0180				Trace	.0180	.0112	Trace			.0180	Trace	.35	.12	59.5	
3806*	5th and L streets	Apr. 14	25	5	Stone	Gravel	do	do	Maples	None	Apr. 13	No.		do	do	656	.0320	.0240	Trace		.0500	.0520	.0112	Trace		.0832	Trace	.5	1.94	122.5		
3890	Lincoln avenue, between S and T streets.	Apr. 21	50		do	Gravel	do	Sidewalk	Maples	do	do	No.		do	do	87					Trace	.0140	Trace			.0140	Trace	.000	1.5	.66	12.5	
3912	Senate stable	Apr. 23	31	5	Stone	do	do	do	Maples	None	Trap	do		do	do	208	.0060	.0000			.0060	.0320	.0140	Trace		.0460	Trace	.3	.30	22.5		
3955	1st and K streets	May 12	32	4.5	Wood	Sand	Fast	Sidewalk	Maples	None	do	No.		do	do	200					Trace	.0112	Trace			.0112	Trace	.000	.8	.30	42.5	
4174	6th and C streets	June 30	30		do	do	do	do	Maples	100 feet	do	No.		Slight	Yellow tinge	428					Trace	.0240	.0080	.0000			.0320	Trace	.18	.50	92.5	
Average																											.0340			.55	57.9	
SOUTHEAST SECTION—PASSABLE.																																
3607	New Jersey avenue and L street.	Nov. 4	27	5	Wood	Clay	Fast	Sidewalk	Maples	5 feet	Oct. 31			Yellow tinge	Clear	640					Trace	.0120	.0000			.0120	Trace	.15	2.58	139.5		
3650	9th and C streets (H. O., 549)	Nov. 18	32	5	do	do	do	do	Maples	None	do	No.		do	do	328	.0180				Trace	.0180	.0000			.0180	Trace	.18	.12	57.5		
3781	12th and H streets	Nov. 27	25	4.5	do	do	do	do	Maples	None	do	No.		Slight	Yellow tinge	358					Trace	.0100	.0000			.0100	Trace	.18	.10	58.0		
3814	1st and K streets	Mar. 10	25	4.5	do	Sand	Fast	Sidewalk	Maples	None	do	No.		do	do	377	.0120	Trace			Trace	.0240	.0100	.0000			.0340	Trace	.000	.38	54.5	
4152	6th and A streets (H. O., 572)	June 23	406		do	do	do	do	Maples	None	do	No.		do	do	406					Trace	.0080	.0000			.0080	Trace	.18	.28	101.0		
Average																											.0162			.69	81.7	
COUNTY—PASSABLE.																																
3509*	12th and California avenue	Oct. 14	110											Slight	Blue	Clear	110					.0000	.0100	.0000			.0140	.000	.00		18.0	
3552	A. J. Curtis, Benning (H. O., 547)	Oct. 21	46											do	do	46	.0600	Trace			.0600	.0720	Trace			.0720	.000	Trace	.10	4.5		
3631	15th street, Mount Pleasant	Nov. 10	160											do	do	160					.0000	.0001				.0001	Trace	.6	.10	17.5		
3681	Sothorn, Conduit road (H. O., 551)	Nov. 25	156											do	do	156					Trace	.0180	.0000			.0180	Trace	.15	.62	17.5		
3828	Caton avenue, NE	Mar. 24	25	4	Stone	Clay	Slow	Sidewalk	Maples	None	Mar. 19	No.		Slight	Yellow tinge	Slightly cloudy	286	.0080	.0000			.0080	.0320	.0100	.0000		.0120	.000	.12	.66	25.5	
3837	Warner's, Brightwood (H. O., 550)	Mar. 31	142											do	do	142					Trace	.0200	.0000			.0200	Trace	.5	.96	47.5		
3844	do	Apr. 7	25	4	Stone	do	do	do	Maples	None	Apr. 13	do		Organic	do	116					.0000	.0600	.0140	Trace		.0740	Trace	.15	.70	41.0		
3889	Mount Pleasant and 17th (H. O., 578)	Apr. 21	34		do	do	do	do	Maples	None	Apr. 13	do		Slight	do	116					Trace	.0100	.0000			.0100	Trace	.15	.42	5.0		
4019	Brady's, Brightwood (H. O., 565)	May 26	33		do	do	do	do	Maples	None	May 26	do		do	do	128	.0240	Trace			.0240	.0320	Trace			.0320	Trace	.32	.30	25.0		
4020	Baumer's, Brightwood (H. O., 560)	May 26	33		do	do	do	do	Maples	None	May 26	do		Slight	Yellow tinge	44	.0320	Trace			.0320	.0480	.020	.0000		.0680	.000	1.0	2.20	7.5		
4044	Armes, 15th and Keneaw (H. O., 568.)	June 2	2		do	do	do	do	Maples	None	June 2	do		Slight	Slight yellow tinge.	46	.0000	.0240			.0000	.0240	.0100	.0000		.0340	Trace	.28	.82	4.0		
Average																											.0350			.78	.63	19.5
NORTHWEST SECTION—CONDEMNED.																																
3652	North Capitol and Randolph	Nov. 13	32	5.0	Sandy	Fast	Roadway	None	None	None	Nov. 14	Yes		Yellow tinge	Clear	148	.0600	.0320	Trace		.0920	.0640	.0180			.0820	.015	3.0	1.88	22.5		
3679	do	Nov. 25	35	5.0	do	do	do	do																								

Miscellaneous water analyses.

Serial No.	Locality.	Date.	Odor.	Color.	Condi- tion.	Total solids.	Nitrogen as free ammonia.				Nitrogen as albuminoid ammonia.					Nitrogen as—		Oxygen consumed	Chlorine.
							1st dist.	2d dist.	3d dist.	Total.	1st dist.	2d dist.	3d dist.	4th dist.	5th dist.	Total.	Ni- trates		
*3490	Va. Dr. King. Cellar, K. betw. 16th and 17th. (H. O. 543.)	1890. Oct. 4	Slight		Clear	19	.0600	.0000		.0600	.0120	.0000					.000	.3	4.5
†3498		Oct. 7	Strong	Yellow	Cloudy	1378	1.2400	.2800	.00+	1.520+	.9200	.360+						4.400	.22	149.0
†3571	Cellar, K. betw. 16th and 17th. (H. O. 544.)	Oct. 24	do	do	Clear	1150	.760	.350	1.40+	1.952+	.520	.340		.220	1.840+	2.750	3.	8.01+	99.5
†3788	N. Y. Ave. and 12th St., eastern. Cellar, F St., Na- tional Union Building. Bay Ridge, wells: Upper	1891. Feb. 3	Slight	Yellow tinge.	Slightly cloudy.	340				Trace.	.0720	.0320	Trace.	.0000		.000	15.0	.90	59.5
§3793		Feb. 4	do	Blue tinge.	Clear	422				do	.0800	.0000				.0800	Trace	25.0	.38	72.5
3803	Lower	Feb. 24	Organic.	Yellow tinge.	do	93	.0120	Trace		.0120	.0600	.0320	.0240	Trace		.650	.00	4.96	127.6
3804		do	do	Strong organic.	do	Slightly cloudy.	91	.1000	.0600	.0120	.1720	.0240	.0100	.0000			.048	15.	1.60	8.6
†3808	13th and F Sts., spring.	Mar. 3	Taint	Blue tinge.	Clear	288				.0000	.0141	Trace				.000	18.	.38	54.5
||3816	{ Springs in } county (C. A.) { Baker. }	Mar. 10	Organic.	Yellow tinge.	Slightly cloudy.	184	.0100	Trace		.0102	.0140	do				.000	.8	.50	12.5
||3817		do	do	Strong org'nic.	Milky	do	163	.0102	do		.0102	.0140	do				.000	.5	.84	22.5
3930	Cistern and spring, 2d and B Sts. SW.	May 4	Slight	Blue tinge.	Clear	339	.0140	do		.0140	.0600	.0140	Trace		.0740	Trace	15.	.30	66.5
**3957	Buckroe Farm, Old Point Com- fort.	May 11	Metallic.	do	do	258				Trace.	.0400	.0120	do		.0520	.005	2.0	.38	27.5
4151	Mount Pleasant, Parke St., cis- tern.	June 23	Slight	Yellow tinge.	do	44	.0080	.0000			.0600	.0320	.0120	.0000	.1140	Trace	.24	1.10	4.5

* Pure country spring.

† Sewage.

‡ Franklin square spring.

§ Spring in cellar.

|| Said to attack iron pipes.

** Spring on low land near beach.

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The results collected above have been reported to the assistant to the engineer commissioner, the superintendent of the water department, or the health officer. As in some cases the results have been misinterpreted by private individuals and too much weight thrown upon the opinion derived from the chemical analysis alone, without due consideration of the other evidence in the case, it has been thought advisable to make reports at present on blanks prepared as follows:

No. 15, E. D.]

ENGINEER DEPARTMENT DISTRICT OF COLUMBIA,
LABORATORY OF THE INSPECTOR OF ASPHALT AND CEMENTS,
Washington, D. C., ———, 189—.

To the Engineer Commissioner, D. C.:

SIR: I have the honor to report the following results of an examination of a sample of ——— water, marked ———, numbered ———, and received ———:

[Results in parts per million.]

Odor
Color
Condition
Hardness
Total
Permanent
Solid residue, 100° C.
Loss on ignition
Nitrogen as —
Free and saline ammonia
Albuminoid ammonia
Nitrites
Nitrates
Oxygen consumed, 100° C
Chlorine
Phosphates

Very respectfully,

Inspector of Asphalt and Cements.

[NOTE.—To interpret and appreciate the value of the above analysis, attention should be paid to the remarks printed on the other side of this sheet.]

1. In judging the character of a water the evidence derived from the chemical analysis should be used only in connection with the evidence as to the source, environment, and history of the water, without which no analysis can be properly interpreted, and may lead to very erroneous conclusions.
2. It is impossible to fix standards of purity beyond which amount the presence of any substance shall condemn any water. For every locality standards of purity must be established by a study of the waters from that locality, and in the interpretation of an analysis such standard must be taken into consideration in connection with a study of the surroundings or source of the water, natural drainage levels, proximity of privies, sewers, and the like, previous or old contamination of the soil, &c. Such standards have been established for wells in the District, as follows:

Averages of results for the several sections and classes.

Section.	Class.	Total solids.	Free ammonia.	Albuminoid ammonia.	Oxygen consumed.	Nitrogen as nitrites.	Nitrogen as nitrates.	Chlorine.	Number of analyses.
Northwest..	Passable	274	.014	.079	.56	Trace.	12.4	44.0	28
	Suspicious or bad	478	.489	.188	1.65	.067	23.8	92.7	79
	All	423	.359	.159	1.35	.049	20.7	71.5	107
Southwest..	Passable	566	.008	.048	.88	.000	28.0	111.0	1
	Suspicious or bad	606	.230	.215	1.56	.040	20.7	123.7	38
	All	605	.224	.211	1.54	.041	23.3	123.3	39
Northeast ..	Passable	262	.023	.083	1.03	Trace.	21.2	33.1	5
	Suspicious or bad	509	.158	.170	1.74	.077	24.1	114.6	17
	All	410	.126	.151	1.58	.059	19.1	96.1	22
Southeast...	Passable	261	.044	.099	.67	Trace.	10.4	52.4	20
	Suspicious or bad	568	.305	.224	1.52	.022	24.6	104.0	31
	All	443	.201	.175	1.19	.014	19.2	85.1	51
County	Passable	118	.028	.086	.83	.001	3.2	16.0	16
	Suspicious or bad	191	.637	.287	2.08	.087	3.6	33.1	21
	All	158	.203	.199	1.54	.050	3.5	25.7	37
District	Passable	237	.021	.086	.69	Trace.	9.2	41.6	70
	Suspicious or bad	486	.361	.209	1.67	.058	21.5	90.8	186
	All	415	.265	.175	1.39	.042	18.1	81.3	256

3. Gross pollution is often revealed at once by chemical analysis, and in such a case immediate condemnation can be made on the chemical evidence alone. Sudden changes in a water previously examined, and whose normal character is known, also justifies condemnation.
4. The nature of the evidence derived from the various determinations may be very briefly stated, as follows:

Color, odor, and conditions.—The best water should be free from odor and color, and should be bright, although many of the most highly contaminated waters are brightest.

Solids.—Entirely dependent on the source of the water. Should not be far above normal in its class. Springs and rivers contain less than well waters, and cisterns or rain water least of all.

Nitrogen as free ammonia is the product of putrefaction of organic matter, and is evidence of contamination in almost all cases.

Nitrogen as albuminoid ammonia points to the presence of nitrogenous organic matter not decomposed, which may be either of animal or vegetable origin. When the ammonia is evolved slowly by alkaline permanganate, it is of recent origin, of animal derivation, with low oxygen consumed and high chlorine; of vegetable if the oxygen consumed is high and chlorine low. When rapidly evolved it shows decomposing organic matter.

Nitrogen as nitrites is indicative of active putrefactive change, except in deep waters. Its presence in more than traces is condemnatory unless the water is otherwise quite clean.

Nitrogen as nitrates is evidence of the final oxidation of organic matter, and points to previous contamination, at present not dangerous unless present in gross amount, if nitrites are absent and the water is otherwise clean.

Oxygen-consuming power.—This should not be high, but its value is chiefly in connection with the interpretation of other results.

Chlorine.—The proportion in waters of any locality is fairly constant. When it exceeds the average it must be determined that its origin is not in sewage or animal excretions, in which it is a large constituent and a source of which it is a strong indication.

Dependence should not be placed on any one of these determinations alone, nor in all of them together except when studied in their relations to each other in connection with the source, environment, and history of the water.

With the above suggestions accompanying each analysis it is probable that the chemist's opinion may become more intelligible to persons of ordinary intelligence.

As a result of the examinations of well water, wells have been abandoned and filled, viz:

WELLS FILLED AND ABANDONED.

Second and C streets SE.; south side G street, between First and North Capitol, NW.; First street, between D street and North Carolina avenue, SE.; Seventh and H streets NW.; Thirteenth street, between K and L, NW.; Ninth and East Capitol streets SE.; O street, between First and North Capitol, NE.; Twenty-first street and Pennsylvania avenue NW.; Third and R streets NW.

AQUEDUCT WATER.

Since the necessity for feeding into the mains direct from the conduit ceased on the completion of the 48-inch main and an opportunity for sedimentation in the distributing reservoir has been renewed and the arrangement of flow from the surface alone perfected the character of the Potomac water supply has improved to a marked degree over last year. Following are analyses of water from a tap in the laboratory of this office:

Analyses of aqueduct water, October, 1890–July, 1891.

[Results in part per million.]

Serial number.	Date.	Condition at distributing reservoir.	Rainfall for 7 days.	Total solids.	Nitrogen as—				Oxygen consumed.	Chlorine.	Remarks.
					Free ammonia.	Albuminoid ammonia.	Nitrites.	Nitrates.			
1890.											
3540	Oct. 14	33	1.07	106	.0000	.0720	.000	.6	2.56	4.0	Cloudy.
3565	Oct. 22	28	.46	124	Trace.	.0880	.000	.6	2.66	4.5	Do.
3604	Nov. 4	32	.05	106	.0120	.0560	Trace	1.0	2.38	4.0	Do.
3620	Nov. 7	36	.....	108	.0000	.0460	.000	.8	1.64	4.5	Slightly cloudy.
3653	Nov. 18	36	.81	83	.0000	.0500	.000	.6	1.52	4.5	Do.
3712	Dec. 16	36	.11	100	.0000	.0200	.000	.6	.56	4.5	Do.
3752	Dec. 30	25	.83	106	.0000	.1200	.000	.5	1.44	4.5	Turbid.
3776	Jan. 20	8	.91	110	Trace	.0520	.000	.6	1.30	4.5	Slightly cloudy.
3790	Feb. 3	10	.87	104	.0080	.0720	.000	.6	2.56	4.0	Do.
3802	Feb. 24	9	1.84	83	.0080	.0448	.000	.6	2.62	4.0	Cloudy.
3815	Mar. 10	36	1.08	93	.0140	.0460	.000	.6	1.70	4.5	Do.
3830	Mar. 24	14	3.05	132	.0100	.0720	.000	.6	2.06	4.0	Slightly cloudy.
3853	Apr. 17	6	1.88	130	.0100	.1060	.000	.6	3.10	4.0	Turbid.
3894	Apr. 21	10	.60	104	.0080	.0480	.000	.6	1.70	4.0	Cloudy.
3932	May 4	36	.75	.....	Trace	.0460	.000	.5	1.30	4.0	Slightly cloudy.
4023	May 26	36	.29	76	Trace	.0380	.000	.6	1.50	4.5	Do.
4124	June 16	36	.00	84	.0080	.0460	.000	.3	2.10	4.0	Do.
4175	June 30	9	.17	116	Trace	.1060	.000	.5	2.82	4.5	Muddy.
Average.....				104	.0043	.0627	.000	.6	1.97	4.3	
Average, 1888-'89.....				111	.0140	.1580	.000	.9	1.91	4.2	
Highest, 1890-'91.....				132	.0140	.1200	Trace	1.0	3.10	4.5	
Lowest, 1890-'91.....				76	.0000	.0200	.000	.3	.56	4.0	

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These results show an improvement in the character of the water over that of previous years from the distributing reservoir, and it may now be said to compare very favorably with that of other cities. Greater opportunity for subsidence would still further improve its quality. Our supply is also remarkably free from algae and other vegetable growths, as compared with northern waters.

METHOD OF WATER ANALYSIS.

The methods employed during the past year have not been essentially modified. The small handbook of Leffinan & Beam, and the suggestions contained in the volumes of the Massachusetts State Board of Health's report for 1890, have been closely followed. Care to exclude water from contact with the air of the laboratory before and during tests for nitrogen as nitrites, has been found to be an essential precaution.

EFFLUENT SEWAGE OF THE BOUNDARY INTERCEPTING SEWER.

Complaint as to the character of the effluent from the Boundary sewer has led Capt. Lusk, assistant in charge of sewers, to request this office to make analyses of this sewage at intervals, to show its general character and variations.

The following results have been obtained up to the time of handing in this report:

Analyses of effluent sewage—Boundary sewer.

[Results in parts per million.]

Serial No.	Date.	Portion.	Weather.	Condi- tion.	Total sol- ids.	Loss on ignition.	Inor- ganic.	Nitrogen as free ammonia.					Nitrogen as albuminoid ammonia.					Nitrogen as-		Oxygen consumed	Chlorine		
								1st dist.	2d dist.	3d dist.	4th dist.	5th dist.	Total.	1st dist.	2d dist.	3d dist.	4th dist.	5th dist.	Total.			Ni- trates.	Ni- trates.
3933	1891. May 5	Surface	Rains	Slightly cloudy.	172	83	89	.3520	.1800	.0600	trace		.5920	.0720	.0246	.0100			.1060	.028	58	.98	32.5
3934	do	Middle	Rainfall 3 days, 532.		112	54	58	.3800	.1000	.0320			.5120	.0600	.0320	.0140			.1060	.038	38	1.70	14.5
3935	do	Ripple	Rainfall 6 days, 532.		113	55	48	.3920	.1400	.0320			.5640	.1000	.0200	.0140			.1340	.038	38	1.50	19.0
4025	May 26	Surface	Rains	Muddy	314	106	208	.4600	.2200	.0600	.0140		.7520	.1520	.0720	.0320	.0200		.2760	.035	8	6.00	19.0
4026	do	Middle	Rainfall		468	98	370	.6600	.3000	.1280	.0140		1.1020	.2660	.1000	.0600	.0400	.0320	.4960	.040	2.5	6.80	15.0
4027	do	Bottom	Rainfall 6 days, 977.		154	54	100	.6320	.3000	.0600	.0240		.9760	.1920	.0600	.0320	trace		.2810	.038	2.5	6.44	15.0
4028	do	Ripple			208	64	144	.6400	.3120	.0600	.0200	.0120	1.0440	.2600	.0640	.0320	trace		.2760	.038	2.5	6.76	15.0
4155	June 23	Surface	Heavy rains.	Yellow, turbid.	200	74	126	.2200	.1000	.0240	trace		.3440	.1000	.0600	.0200	.0320		.2120	.030	8	3.26	26.5
4156	do	Middle	Rainfall		151	36	115	.1400	.0600	.0080			.2080	.1920	.1000	.0600	.0240		.3760	.038	5	5.38	17.5
4157	do	Bottom	Rainfall 3 days, 1.66.		150	44	106	.1120	.0600	.0120			.1840	.2200	.1000	.0600	.0320		.4120	.045	5	5.10	17.5
4158	do	Ripples	Rainfall 6 days, 2.76.		180	58	122	.2200	.0600	.0240			.4040	.1420	.1000	.0600	.0240		.3260	.040	8	4.50	17.5
4197	July 7	Surface	Dry		162	60	102	.1800	.1400	.0080			.3280	.1400	.0600	.0320	.0100		.2420	.064	5	2.36	24.0
4198	do	Bottom	Rainfall 3 days, .01.	Cloudy	130	40	90	1.3000	.8000	.1120	.0100		2.2210	1.3600	.1400	.0800	.0600		1.6400	.084	2.5	7.00	17.5
4199	do	Ripples	Rainfall 5 days, .17.		114	62	52	1.3600	.1420	.0600	.0080		1.5700	.1800	.1000	.0400	.0080		.3280	.080	5	3.20	17.5
4243	July 21	Surface	Rains	Cloudy	185	86	99	2.8000	1.4000	.0480	trace		4.2480	.1000	.0624	.0140	trace		.1764	.048	8	1.90	24.0
4244	do	Middle	Rainfall		122	52	70	.4000	1.8000	.0600	trace		5.6600	.1520	.1000	.0400	.0240		.3160	.035	3	4.36	16.5
4245	do	Bottom	Rainfall 3 days, .54.		138	56	82	3.5900	1.4000	.0326	trace		4.9320	.1800	.0720	.0326	.0140		.2980	.028	5	3.70	16.5
4246	do	Ripples	Rainfall 5 days, 1.39.		136	48	88	3.5000	1.4000	.0152	trace		4.9152	.1520	.0600	.0320	.0160		.2600	.035	3	4.00	16.5

The outlet of the sewer is a pool of varying depth, washed or excavated out of the neighboring gravels. This pool overflows into the shallow bubbling stream which runs thence to the Eastern Branch, carrying with it the sewage diluted by the pure water coming in from the west a short distance below the pool. Where these mixed liquids run over a gravelly bed, not far below their junction, I have called the ripples. Samples collected here represent the mixed effluent flowing to the river. In the pool I have usually had samples collected at the surface, near the bottom, and in the middle depths of the pool. These samples should give a fair illustration of the characteristics of the pool water.

The analyses show that the effluent is at no time filthy as compared with average sewage, as can be seen by reference to analyses of sewage from the several other sewers of the District, published in my report for last year, and with many analyses given in the report of the Massachusetts State Board of Health.

In all but two instances the amount of unoxidized organic matters, as represented by the nitrogen as albuminoid ammonia, is comparatively very small and the amount of oxygen in permanganate consumed in oxidizing this is in no case large.

Active processes of oxidation seem to be at work at all times, as shown by the presence of nitrogen in considerable amount in the form of nitrates, and during the drier periods the products of final oxidation are large.

The samples collected at different times vary considerably in the amount of filth they carry and in a way not corresponding to the rainfall entirely. As the precipitation has been large during the whole period in which samples have been collected, we have insufficient data to judge of the character of the effluent in very dry weather. It would seem desirable, therefore, to postpone any particular statements in regard to the general nature of this sewage and the possibility of its forming a nuisance until all conditions of temperature and rainfall have come under our observation.

HYDRAULIC CEMENTS.

The inspection of cement since my last report has involved an increased amount of labor over last year, owing to the considerable amount of hydraulic base in use under asphalt pavements, and the necessity for a control of the Portland cement in use in sidewalks. Beside the regular brands in use, many miscellaneous samples have been brought to this office for inspection, either in connection with bids or as substitutes by the contractor for regular brands, to determine if deliveries would be accepted by the District.

The brands and samples inspected were as follows:

Brand.	Lots.	Samples.	Brand.	Lots.	Samples.
Round Top.....	147	1,415	Crescent.....	1	1
Cumberland.....	28	120	Catasauqua.....	1	1
Antietam.....	8	8	Salt Lake.....	1	1
Rock Lock.....	4	4	Unknown.....	2	2
New York and Bridge.....	3	50			
Egyptian Union.....	2	2		199	1,606
Acme.....	2	2			

The character of these cements will appear from the results of tests here given, which I have selected to show the poorest, best, and average lots, where a sufficient number of tests are on record to do so. Attention in consideration of the results should be given particularly to the set and percentage of water in the sand briquettes as important factors in modifying the results for tensile strength. Slight additions of water over and above the normal amount, which are at times necessary for working a quick-setting cement, have a strong effect in reducing tensile strength.

Upon this subject I shall soon hand you a special report.

Results of tests.

Brand.	Lot.	Date delivered for inspection.	Residue on sieve.		Set (wire test.)		Tensile strength.				Water in—		Temperature.	
			50-mesh.	100-mesh.	Initial.	Hard.	Neat.		Two parts sand.		Neat mortar.	Sand mortar.	Water.	Air.
							1 day.	7 days.	28 days.	7 days.	28 days.			
Round Top:			P. cent.	P. cent.	Minutes.	Mins.					P. cent.	P. cent.	° F.	° F.
Best.....	4070	June 8, 1891	3	17.5	28	46	92 102 96	260 258 262	332 338 336	120 126 122	260 256 262	33	14.5	74
Poorest.....	3958	May 12, 1891	3.5	23	15 22 18	.....	86 78 88	168 146 150	302 280 296	46 44 48	154 148 152	33.5	16.5	74
Average.....	3482	Oct. 3, 1890	4	18.5	20 28 23	.....	72 66 76	198 206 204	312 320 364	80 80 78	230 228 226	36	15.6	70
Cumberland:														
Best.....	4060	June 5, 1891	3.5	25.8	14 21 16	.....	270 264 278	288 310 314	350 348 384	38 40 40	188 194 186	36	17.2	76
Poorest.....	4012	May 22, 1891	3.8	26.5	9 13 11	.....	100 98 106	140 164 178	396 402 436	22 24 20	86 80 84	32	17	82
Average.....	4015	May 23, 1891	4.5	27	12 20 16	.....	98 100 98	180 168 188	368 378 308	38 36 30	130 128 128	32	17.1	72
Antietam:														
Best.....	4141	June 20, 1891	2.5	15.8	45	.....	46 42 47	128 132 130	282 342 340	78 70 68	150 164 160	32	15	88
Poorest.....	4016	May 25, 1891	3.5	15.8	40	.....	52 58 56	114 112 116	280 286 292	38 36 36	170 168 174	35	16.6	78
Average.....	3951	May 11, 1891	1.5	14.5	13	41	52 48 48	98 100 97	250 256 248	44 36 36	124 120 126	35.5	17	84
Rosendale:														
New York and Bridge	3950	May 9, 1891	9	24	20 34 27	.....	40 37 42	104 100 102	248 260 252	20 22 20	94 102 100	33.5	13	82
Do.....	3962	May 13, 1891	8.5	23	18 48 30	.....	54 58 50	96 98 92	272 274 310	20 20 18	58 64 68	32	12.8	76
Rock Lock:														
Average.....	3904	Apr. 24, 1891	3.5	15.1	25	.....	20 24 22	86 88 84	184 198 188	26 32 28	100 90 108	36.5	13	75
With one-fifth Portland*														
Egyptian Union.....	3917	Apr. 28, 1891	6.5	29.1	17 24 18	.....	20 32 35	62 78 90	202 200 204	42 46 48	100 98 102	38.1	17.3	80
Acme.....	3903	Apr. 24, 1891	2.5	14	18	.....	86 83 88	78 150 168	256 250 258	86 82 78	146 138 138	28	14.4	75
Crescent.....	4101	June 10, 1891	5.5	16	14	26	44 40 42	110 112 110	118 120 122	18 20 18	76 78 74	38	18.5	82
Catasauqua.....	4169	June 27, 1891	5	17	13	.....	36 39 38	96 98 98	212 210 212	20 18 20	82 80 78	34	18	84
	3944	May 7, 1891	7	22	18	.....	Blows.	28 26 28	140 138 152	10 12 10	48 36 48	37	20	78

*4 to 1 of Hanover Portland.

The Round Top has sustained its reputation of being a highly reliable cement and one giving rapid immediate returns in strength.

The Cumberland also proves to be a good cement, but not quite as even and well ground. It is a lime cement, giving rapid immediate returns in tensile strength, and usually has a very quick set. The Antietam cement has improved vastly of late and now represents one of the best cements of its class, the magnesian. It works particularly well and rams well in concrete. Its use in base for pavements has been entirely satisfactory.

The remaining brands are some of them fair cements, just passing our specifications at times, but not suited for arch work and hydraulic base where immediate strength is needed. Some of them have been found suitable for use alone in base and at other times enforced by Portland in the proportion of one to four. This method of working with cements slightly deficient in strength, when a short supply compels their use, has been found satisfactory.

The Egyptian Union cement, of which but a few barrels have been used, judged from its market price, must be a mixture of this description. It gave satisfactory results.

Our domestic natural light burned cements are extremely satisfactory, equal to any in the country and exceeding most, the limited supply being the only drawback connected with them. They are suited to almost all kinds of work, except that on surfaces exposed to weathering, and give particularly good results in concrete, as evidenced by some of the hydraulic bases of pavement recently cut, which had a tensile strength equal to the rock of which it was composed.

PORTLAND CEMENTS.

Numerous brands of Portland cement have been tested during the past year, although Mannheim has been supplied under our contracts satisfactorily. Following are the brands and samples:

Brand.	Lot.	Samples.	Brand.	Lot.	Samples.
Mannheimer	17	311	Globe	1	1
Stettiner Anchor	9	48	Hercules	1	1
Stettiner Stern	1	1	Hoxter	1	1
Hanover	2	5	Burham	1	1
Dyckerhoff	1	1	Hemmoor	1	1
Germania	2	1	Booth's	1	1
Schifferdecker	1	1	Johnston	1	1
White's	1	1	Atlas	2	2
Brooks & Shoobridge	2	2			
Alsen	1	1			
				46	383

Results of tests are as follows: They show a marked improvement in the quality of the Portland cements for sale in this market during the last few years. There are now several brands available, which are of the very highest grade.

Brand.	Lot.	Date delivered for inspection.	Residue on sieve.		Set (wire test).		Tensile strength.				Water in—		Temper-ature.	
			50-mesh.	100-mesh.	Initial.	Hard.	Neat.		Three parts sand.		Neat mortar.	Sand mortar.		
							1 day.	7 days.	28 days.	7 days.				28 days.
			Per ct.	Per ct.	H. m.	H. m.	260	610	730	210	318	Per ct.	Per ct.	°F.
Mannheimer:			Trace	9.5	1 10	.....	260	610	730	210	318	24	13	78
Best.....	4017	May 25, 1891	Trace	9	18'30'23'	.....	150	510	686	120	180	23.5	16	66
Poorest.....	3856	Apr. 8, 1891	.....	.....	{ 1 5 } 1 18 1 14	.....	306	480	656	196	298	24	13	68
Average.....	4064	June 6, 1891	.....	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stettiner Anchor:														
Best.....	4033	May 28, 1891	Trace	17.5	1 10	.....	180	490	554	140	208	23.5	13.8	72
Poorest.....	3907	Apr. 27, 1891	.5	18	28	.....	136	432	550	88	140	24.6	11.6	76
Average.....	3938	May 6, 1891	.4	17.8	29	.....	90	480	580	110	168	24	11.5	71
Stettiner Star.....	3685	Nov. 26, 1890	Trace	9.5	53	1 25	126	540	646	156	230	24.1	11.7	70
Hanover.....	3589	Oct. 28, 1890	Trace	9.5	7 30	.....	.....	530	664	138	250	24	14.8	62
Dyckerhoff.....	3670	Nov. 22, 1890	Trace	10	3	5 22	180	516	774	140	240	24	11	70
Germania.....	4075	June 8, 1891	Trace	17.5	6 40	.....	398	684	796	160	250	22	12.4	74
Schifferdecker.....	4074	do.....	Trace	5.8	1 48	.....	174	292	420	104	150	26	15	70
White's.....	3516	Oct. 10, 1890	7	28.5	12	25	178	422	430	77	106	20	14.2	72
Brooks & Shoobridge.....	3518	Oct. 10, 1891	2.5	23.5	4 25	.....	158	466	610	94	140	22.1	13.3	73
Alsen.....	3517	do.....	2.5	17.5	1 32	.....	218	491	626	168	188	23.5	14.2	72
Globe.....	3597	Nov. 1, 1890	1	21	1 13	2 30	98	458	540	96	146	25	13.1	60
Hercules.....	4071	June 8, 1891	1	9.5	40	55	240	450	589	96	150	23.2	12.3	70
Hoxter.....	3478	Sept. 24, 1890	Trace	3.5	3 23	.....	144	368	464	100	228	24.1	14.3	70
Burham.....	4076	June 8, 1891	2	23.5	5	12	248	570	696	94	130	21.5	11.5	70
Hemmoor.....	4077	do.....	.5	13.5	2 55	.....	278	480	520	102	196	23.5	13	72
Booth (English).....	4080	do.....	2	22.5	5	13	194	336	380	86	98	23.5	13	74
Johnston's (Portland).....	3939	May 6, 1891	.8	17	1 30	.....	168	284	274	44	90	26	12.5	70
Atlas.....	4069	June 8, 1891	Trace	13	4 35			762	796	104	230	25	15	78
Do.....	4222	July 15, 1891		3.8	1 10		220	470	512	144	248	33.5	11.5	88

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TESTS OF TENSILE STRENGTH AFTER LONG INTERVALS.

In addition to the preceding tests of natural and Portland cements made in routine manner, there have been from time to time more extended examinations of certain brands extending over a year or more. The results obtained are here given without comment further than drawing attention to the fact that some of the weaker natural cements during the first few weeks attain or excel in strength the best brands at long intervals, and are therefore quite as good for ordinary masonry construction.

ROUND TOP.

Lot 2786.				
Date delivered for inspection, December 11, 1889.				
Residue on sieve:				
50-mesh	per cent.	5		
100-mesh	do.	16		
Set (wire test):				
Initial		27	35	29m
Hard				
Tensile strength:				
Neat:				
One day		98	104	
Seven days		124	160	152
Twenty-eight days		268	292	262
Three months		382	386	383
Six months		384	370	376
One year		390	390	402
Two parts sand:				
Seven days		34	34	36
Twenty-eight days		70	68	68
Three months		260	260	268
Six months		289	272	276
One year		350	346	352
Water:				
In mortar	per cent.	34		
Temperature	°F.	74		

CUMBERLAND.

Lot 2872.				
Date delivered for inspection, January 8, 1890.				
Residue on sieve:				
50-mesh	per cent.	5.5		
100-mesh	do.	13		
Set (wire test):				
Initial		41m		
Hard		1h	30m	
Tensile strength:				
Neat:				
One day		104	103	
Seven days		260	272	270
Twenty-eight days		398	394	399
Three months		328	331	326
Six months		376	368	370
One year		412	420	416
Two parts sand:				
Seven days		22	18	18
Twenty-eight days		40	40	44
Three months		220	226	224
Six months		298	290	296
One year		320	330	328
Water:				
In mortar	per cent.	34.1		
Temperature	°F.	72		

ANTIETAM.

Lot 3242.				
Date delivered for inspection, July 5, 1890.				
Residue on sieve:				
50-mesh	per cent.	1.5		
Set (wire test):				
Initial		12	30	20m
Tensile strength:				
Neat:				
One day		48	52	48
Seven days		108	119	102
Twenty-eight days		292	268	320
Three months		370	376	374
Six months		360	374	376
One year		390	400	398
Two parts sand:				
Seven days		46	42	44
Twenty-eight days		148	150	146
Three months		216	220	218
Six months		266	250	250
One year		296	302	300
Water:				
In mortar	per cent.	32		
Temperature	°F.	80		

HUDSON RIVER (ROSENDALE).

Lot 2573.				
Date delivered for inspection, October 15, 1889.				
Residue on sieve:				
50-mesh	per cent.	2.5		
100-mesh	do.	10		
Set (wire test):				
Initial		2h	16m	
Hard		3h	49m	
Tensile strength:				
Neat:				
One day		38	40	
Seven days		60	60	58
Twenty-eight days		170	174	176
Three months		364	369	374
Six months				
One year		428	420	426
Two years		562	560	560
Two parts sand:				
Seven days		10	10	
Twenty-eight days		42	46	42
Three months		202	192	200
Six months				
One year		234	220	239
Two years		238	240	239
Water:				
In mortar	per cent.	30		
Temperature	°F.	64		

SALT LAKE (COLORADO).

Lot 4200.				
Date delivered for inspection, July 7, 1891.				
Residue on sieve:				
50-mesh	per cent.	3.5		
100-mesh	do.	13.6		
Set (wire test):				
Initial		8m		
Hard		41m		
Tensile strength:				
Neat:				
One day		80	80	82
Seven days		196	210	198
Twenty-eight days		280	278	284
Three months		380	390	388
One part sand:				
Seven days		168	170	176
Twenty-eight days		352	346	356
Three months		464	468	462
Two parts sand:				
Seven days		52	48	54
Twenty-eight days		228	232	230
Three months		330	336	334
Water:				
In mortar	per cent.	37		
Temperature	°F.	76		

HOFFMAN (ROSENDALE).

Lot 2617.				
Date delivered for inspection, October 23, 1889.				
Set (wire test):				
Initial		48m		
Hard		1h	25m	
Tensile strength:				
Neat:				
One day		86	86	
Seven days		98	98	96
Twenty-eight days		230	206	212
Three months		410	454	476
Six months		434	456	434
One year		498	500	498
Two parts sand:				
Seven days		12	12	12
Twenty-eight days		58	57	50
Three months		206	196	204
Six months		204	202	206
One year		200	212	216
Water:				
In mortar	per cent.	30		
Temperature	°F.	66		

MANNHEIMER.

Lot 3236.			
Date delivered for inspection, July 2, 1890.			
Residue on sieve:			
50-mesh	per cent..	5	
100-mesh		9.	
Set (wire test):			
Initial	2h 40m		
Hard	4h 39m		
Tensile strength:			
Neat:			
One day	328	340	338
Seven days	536	532	538
Twenty-eight days	576	574	578
Three months	650	590	638
Six months	676	714	698
One year	736	748	736
Three parts sand:			
Seven days	112	117	116
Twenty-eight days	146	136	138
Three months	182	210	206
Six months	236	230	230
One year	280	274	286
Water:			
In mortar	per cent..	23	
Temperature	°F..	78	

DYCKERHOF.

Lot 2580.			
Date delivered for inspection, October 18, 1889.			
Residue on sieve:			
50-mesh	per cent..	3.2	
100-mesh	do	6.2	
Set (wire test):			
Initial	3h 10m		
Hard	5h 43m		
Tensile strength:			
Neat:			
One day	264	264	
Seven days	638	640	636
Twenty-eight days	520	536	541
Three months	756	774	776
Six months	722	722	726
One year	780	776	778
Three parts sand:			
Seven days	110	112	110
Twenty-eight days	160	168	180
Three months	184	186	189
Six months	252	252	249
One year	397	388	398
Water:			
In mortar	per cent..	22	
Temperature	°F..	63	

STORAGE AND TESTING OF CEMENTS.

The present cement houses used for storage of supplies for the sewer division are very satisfactory, making it possible to carry out, before delivery to the contractors complete inspection and tests, so that no doubtful cement goes into the work. Unfortunately the capacity of these storehouses is not great enough to furnish room for storage of cement for use in street pavements. This is unfortunate, as the only way in which cement for base can now be tested is while it is in the hands of dealers or on the work. If the policy of laying hydraulic base for asphalt pavements is to be continued immediate provision should be made for cement storage sufficient to enable the District to furnish contractors in the same manner as for sewer work, or else contractors should be obliged to submit their supplies to inspectors while under storage a sufficiently long time before hauling upon the work to give satisfactory results.

ASPHALT CONCRETE PAVEMENTS.

In connection with the laying of asphalt pavements, my duties as inspector lead me to the supervision and study of the various details of the industry at the works and upon the street, which may be conveniently classified as follows:

- (1) Stone as crushed for base and binder, sand, etc.
 - (2) Hydraulic cement in use in base.
 - (3) Coal tar, its quality, consistency, and suitability for base and binder.
 - (4) Binder as composed of heated crushed stone and bituminous cement.
 - (5) Crude asphalt, its quality and nature.
 - (6) Refining of the crude asphalt.
 - (7) Residuum of petroleum or heavy petroleum oils.
 - (8) Asphalt cement or oiled asphalt, character, method of production, and desirable properties.
 - (9) Surface mixture, its manipulation, plant for production, and desirable properties.
 - (10) Placing materials in the street.
 - (11) Study of old pavements as a source of information.
- These branches of the industry I shall discuss in order.

STONE.

The stone at present in use is from the same source as that of previous years, a schistose granite which, although it spalls somewhat and makes a large amount of dust in the crushers, furnishes a broken stone which experience shows to be entirely suited for concrete and binder, its only disadvantage being the somewhat sharp and acute edges of many of the fragments, which produce much dust from the attrition of handling or the motion of the rotary heaters.

The sand has been the usual supply from the river bed some miles below Washington. It has been fully up to its usual high standard, with one exceptional lot from the Georgetown channel above the Long Bridge, which was condemned.

The facilities for heating both sand and stone have remained the same at the Cranford Company's plant and are satisfactory.

The dilapidated old plant of the Barber Company has been replaced by proper appliances, and fuel oil has been substituted for wood as a source of heat with satisfactory results.

Stone dust has been mixed with sand as usual, except in the case of one lot of sand which was too fine and soft to make it desirable.

About 3.5 per cent of limestone has been used in the mixture, and some of this has been rather coarse. In my opinion, if it has any value it must be in its minute state of division either for physical or chemical reasons. Some experiments, referred to under asphalt cements, will throw light upon the physical side of these question.

HYDRAULIC CEMENTS.

During the past year a partial return has been made to hydraulic concrete as a substitute for bituminous concrete as base for pavements. This is a most desirable and necessary change, because where there is the slightest yielding of the subsoil base at any point the viscous nature of the bituminous base is sure to cause it to respond, while it also allows the much freer access of water to the surface mixture. It is my opinion that hydraulic base should be exclusively used, not only for the above reason, but on account of the preference to be given it when resurfacing is necessary.

As I have already mentioned when discussing cements, the present storehouses are of insufficient capacity to permit their being used for holding a supply of cement for pavements. The necessity for additions to allow the District to furnish contractors for pavements with cement in the same manner that is now done under sewer contracts, after thorough testing, is very apparent, since at present it is only possible to test the supply either in the hands of dealers or upon the work, neither of which methods is satisfactory to the contractor or the district.

The cement in use during the past year has included Cumberland, Rock Lock, Egyptian, Union, and Antietam, and at times small additions of Portland to the Rock Lock, where amendment of deficiency in strength was necessary. Results of tests of these cements have been already given.

The hydraulic concrete has been generally laid with care and skill, and with a depth of six inches has proved entirely satisfactory under the roller after an interval of from seven to ten days from the time of placing on the street. It has been thoroughly sprinkled during all dry and hot weather every day, and none laid during cold weather.

COAL TAR.

I have in previous reports called attention to the inferior nature of the supply of coal tar in the market during the past few years since the decided changes which have been introduced, with the manufacture of water gas, into the industry from which the tar is derived, and it now contains large quantities of soot and naphthalene, which are decidedly deleterious in their nature.

Some samples taken at the tar works of E. B. Warren & Co. gave the following results on examination and analysis:

	Per cent of soot insoluble in carbon disulphide.
Crude tar, Washington Gasworks, much water	27.07
No. 4 paving cement, prepared by E. B. Warren & Co.*	34.82
No. 4 paving cement, prepared in New York*	27.05

* These two paving cements penetrated only 75 and 50 degrees respectively, so that it was necessary to mix softer material with them.

During the past year there has been perhaps some slight improvement, and the supply has been sufficiently good to meet the demands of the purposes to which it is now alone applied—binder and base, although not for surface. The very varying consistency of different lots still continues, but by careful mixing of different consignments and control by the testing or penetration machine a reasonably constant character can be preserved. A penetration of from 125° to 150° at 78° F. is regarded as most suitable.

BINDER.

Binder which is composed of broken stone, passing a 1½-inch ring, heated in rotary drums with wood or fuel-oil burners, and then coated with bituminous cement, has been used in two forms. In one, the old method, the stone heated to about 200 to 212 degrees F. has been treated with a coal-tar cement of about 150 degrees pene-

tration. In the other, a cement composed of asphalt and residuum oil, made in the same way as for surface, has been substituted, except that the amount of oil was increased and the cement made softer, while, owing to the higher temperature at which the asphalt must be handled, the stone was made considerably hotter. The asphalt employed was from two cargoes of "overflow," or land pitch as distinguished from lake asphalt, which I have alluded to in a previous report as being condemned for surface work, but which seemed suitable for binder.

The results with the asphalt binder more than justified all anticipations. It was preferable to tar binder, resisting traffic much better, and being laid without difficulty. I should recommend its universal use whenever the cement can be obtained at an equal cost with tar.

Binder has been used with great success of late in minor repairs, replacing the surface mixture formerly used in the bottom of cuts, with the results that patches do not now pull out as formerly and last much longer, while at the same time considerable economy is derived from the change.

Binder as a substitute for the old cushion coat seems to meet with general favor and to be rapidly supplanting it. The size of the crushed stone in use here might perhaps be reduced with advantage, thus obtaining a more solid mass, and with less tendency to go to pieces while hauling surface mixture over it for long distances or in cold weather. In New York the stone in use is very much smaller than here and the binder more compact.

CRUDE ASPHALT.

In my last report I discussed at length the relative quality of the crude asphalt from the Trinidad Lake and that from the exterior overflow or land deposits. As a result of the agitation of the subject at that time we have since been in receipt of asphalt from the lake only.

The cargoes which have been received during the period covered by this report have been examined and analyzed with the following results:

Analyses of crude asphalt, 1891.

Vessel	Lottie.										Hattie Lewis.				Frances.	Gibba.	Platina.		Boynton		
	3786.			3794.			3795.				Av. of all.	3799.		3800.			Average.	3812.		3838.	
	Jan. 24.			Jan. 27.			Jan. 28.					Feb. 10.									Feb. 11.
	No. 1.	No. 2.	No. 3.	No. 1.	No. 2.	No. 3.	No. 1.	No. 2.	No. 3.	No. 1.		No. 2.	No. 3.								
Serial No																				3919.	
Date																				Apr. 27.	
Sample																				Aver- age.	
Water	27.42	26.40	27.02	9.97	10.44	9.30	13.08	15.84	11.18	26.89	9.52	13.27	14.48	19.00	6.29	17.19	17.35	3.69			
Inorganic matter	27.38	26.46	26.3	32.96	32.35	32.52	32.05	30.50	.....	.....	32.67	31.44	31.04	29.22	33.50	29.94	30.09	35.12			
Organic, not bitumen	6.88	6.52	7.51	9.10	.....	8.21	8.54	.....	8.79	.....	8.79	9.44	8.94	7.18	8.89	7.59	7.67	9.09			
Bitumen	38.32	40.62	39.13	47.97	.....	49.97	45.37	.....	.....	.....	49.12	45.85	45.54	44.60	51.32	45.28	44.87	52.10			
Inorganic matter	37.63	35.95	36.09	36.56	36.61	36.12	35.86	36.24	37.13	36.24	36.17	37.40	36.29	36.62	35.75	36.15	36.41	36.28			
Organic, not bitumen	9.46	8.86	10.29	9.52	10.18	.....	9.05	9.62	9.83	.....	9.71	10.31	10.46	10.16	8.87	9.48	9.28	9.22			
Bitumen	52.91	55.19	53.62	53.92	53.21	.....	53.09	54.14	53.04	53.83	54.12	52.29	53.25	53.22	55.06	54.77	54.31	54.50			
Organic, not bitumen .....	.....	.....	.....	15.01	.....	.....	15.09	.....	.....	15.23	.....	.....	.....	16.03	13.87	14.36	14.59	14.47			
Bitumen .....	.....	.....	.....	84.99	.....	.....	84.91	.....	.....	84.77	.....	.....	.....	83.97	86.13	85.64	85.41	85.53			
Softens .....	.....	.....	.....	Deg.	.....	.....	.....	.....	.....	.....	.....	.....	.....	Deg.	Deg.	Deg.	Deg.	Deg.			
Flows .....	.....	.....	.....	205	.....	.....	.....	.....	.....	.....	.....	.....	.....	205	205	.....	.....	205			
	.....	.....	.....	220	.....	.....	.....	.....	.....	.....	.....	.....	.....	220	220	.....	.....	215			

There is an astonishing uniformity in the proportions of mineral matter, bitumen, and organic matter not bituminous. The character of the bitumen has been better in previous shipments, and the defect in this direction I attribute to the fact learned from the master of one of the vessels bringing the asphalt, that much of it had lain on the beach sometime after being brought from the lake, subject to the action of the weather, etc. Experiments, which I conducted to learn the action of water on crude asphalt and refined, gave the following results, and show that the bitumen of the crude asphalt deteriorates when kept in contact with water, while the more compact refined material is not essentially altered during the same period of exposure.

Flasks were arranged containing asphalt and water in the following proportions on July 5, 1889, and were opened November 5, 1890, after eighteen months:

	Softens.	Flows.
200 g. crude and 500 cc. water.....	220	238
200 g. refined and 500 cc. water.....	180	198
200 g. refined, 20 g. carbonate of lime mixed in, and 500 cc. water.....	180	198
200 g. refined, fused with 20 g. carbonate of lime, and 500 cc. water.....	180	198

Shipments during July, 1891, have shown improvements, and I have no doubt we are now securing the best lake asphalt.

REFINING THE ASPHALT.

Increased experience in handling the four large horizontal refining stills at the Barber Asphalt Paving Company's yard, which supply all the asphalt used in the District, shows that with low fires a charge of about 55 to 60 long tons of asphalt can be refined—that is to say, melted and freed from water, floating organic matter, and sediment—in from ninety to one hundred hours and with extremely small loss of volatile organic matter or oil, and with little or no hardening of the bitumen. If the finished product is drawn off to be stored or shipped to other works as refined, the loss has been found to amount to between about 33 and 36 per cent, divided as follows:

	Tons.
Water and volatile.....	15
Sediment and bottoms.....	3 to 5

Usually, however, for our work the refined is oiled as it stands in the still without separation from the bottoms.

RESIDUUM OIL.

During the past year considerable attention has been paid to the question of residuum oil. The nature and quality of this material is undoubtedly, after the obtaining of a supply of good asphalt, the most important consideration in connection with the production of a perfect pavement. The residuum which has been in use in past years has not been prepared with any particular view to its use in connection with asphalt. It has merely been the residue left in the stills after the distillation of crude petroleum for illuminants where attention has been paid toward the production of a good distillate and but little to the quality of the residuum. In many cases cracking or rapid heating of the crude oil has been customary to bring about a larger yield of distillate, thus leaving in the residuum products of decomposition and coke of a nature undesirable for the uses to which it must be applied in pavements.

Then, again, in addition to the varied methods of treatment, the sources of supply have been very numerous, involving an origin of the residuum in many different kinds of crude petroleum, some of which are less desirable than others.

The result has been that asphalt cements have been made with far from a constant quality of oil. Some of it has been badly cracked or decomposed by high heats, others have not been sufficiently reduced and contained large amounts of oil of too low vaporizing point and viscosity; others contained too much paraffin scale, very hard at low temperatures, but softening too much at summer sun temperatures, while at times residuums would be obtained which seemed to combine the most desirable qualities. It is much easier to say what qualities should be excluded from a residuum than with our present knowledge to specify its desirable qualities. In my opinion good residuum should show no signs of having been subjected to high temperatures or cracking, as evidenced by color, coke, or products of decomposition; it

should not contain more than 10 per cent of oil vaporizing at 400° F., when about 3 ounces are exposed in a small glass retort to that temperature for ten hours; it should not show too great susceptibility to temperature between freezing and 110° F.; that is to say, become too hard at one extreme or too liquid at the other. These characteristics may be determined approximately as follows: The color should be nearly like crude petroleum; the oil should be free from grit, coke, or solid matter, and on distillation should not show evidences of cracking nor give a distillate containing coarse, hard paraffin scale. It should not flash in a closed oil-tester below 325° F., otherwise there is too much light oil present, which would be given off at this the temperature of oiling the cement. It should not, nor should the residue, after exposing the oil to a temperature of 400° for ten hours, cease to flow and become semisolid at temperatures above 65° F., nor flow below 32° . It should not lack viscosity at 100° F., showing too great susceptibility to small changes of temperature.

With our present limited knowledge nothing more can be specified as to residuum, and something of this may require change.

The Barber Asphalt Paving Company are now, however, engaged in an attempt to produce suitable oil for paving purposes, of a constant quality, by disregarding the nature of the distillate produced, paying attention only to the residuum; and it is to be hoped that in this way this very uncertain element of chance in producing asphalt cements and pavement may be eliminated and at the same time some debatable questions as to the amount of oil lost in the process of agitating the asphalt and oil with an air blast in obtaining an intimate mixture be determined.

At present, although we are far from a satisfactory position in relation to residuum, we are much better off than in the past, and seem to be about to reach the desired end since we have become more thoroughly acquainted with the shortcomings connected with our former supplies.

ASPHALT CEMENT.

The asphalt cement or oiled asphalt in use in the pavements of the District during the past year has all been produced in the large horizontal stills of the Barber Asphalt Paving Company, with the exception of a small amount made by the Cranford Company in their own small upright stills, when the former company's supply of crude asphalt was exhausted.

With the best asphalt and the best oil as starting points it is still difficult to make a good asphalt cement without great attention to details.

The temperature of the refined asphalt must be regulated so as to be about 325° to 350° F. Where, as at the Barber yard, the still is filled with crude and the refined product oiled in the same still, the asphalt must be allowed to cool, after refining, to the proper temperature. With the cement at the proper temperature, the oil is pumped in by inches from the storage tanks, each inch representing a known number of pounds. This is readily done if there is no water in the oil, and if the weather is not cold. In the first place foaming takes place and care must be exercised that the still does not run over, and in the second the oil is so viscous as not to flow in the pipes. These difficulties are both met with from time to time, but can be overcome. In the coldest weather the oil is hoisted to the stills in barrels.

How much oil to add is described from experience with the particular kind in hand, and the consistency of the cement desired. With the "Solar oil" about 11 pounds to every 100 of crude, originally used, is the starting point. As soon as the oil begins to flow in agitation is begun with a blast of air delivered by two outlets from three pipes through the three man holes of the still and sunk nearly to the bottom. The blast of air is derived from a rotary blower or direct pump, the latter being much preferable. With the blower much trouble has been encountered in moving the contents of the still sufficiently rapidly to produce a homogeneous mixture.

It is the production of such a homogeneous mixture which is the secret of good cement making, and here the greatest care and most careful observation must enter into the process.

Refined asphalt and residuum oil are of very different specific gravities, the first being considerably heavier than water, having at 325° F. a sp. gr. of 1.11, while the oil is considerably lighter than water, sp. gr. .94. At the same time the bitumen of asphalt is not very soluble in petroleum oil. The result is, a vast amount of mechanical agitation is necessary to make a homogeneous mixture of these two bodies, and if such an end is not accomplished the cement is not even, some parts being softer than others, and no portion being homogeneous in itself. This is fatal to good surface, for it will then inevitably roll out of shape and into waves. The agitation is therefore kept up for a long time, ten hours, being careful to see that the whole still is kept in motion and not one part alone, caused by clogging of the openings of one or more delivery pipes. Should all the conditions have been favorable, samples drawn now from different parts of the still will show the same penetration on the testing machine, and

the desired one, if the oil has been added in right amount. If samples from different portions of the still do not agree, then more agitation is needed, probably with some change in the position of the entrance of the air blast or mechanical agitation of the bottom of the still, where sedimentation has taken place. Ten hours with a direct-action pump should give a homogeneous cement. With the rotary we have had much trouble, and much of the cement made with this pump has been of necessity reworked by the Cranford Company before use.

We have assumed that the cement after ten hours had the proper penetration or consistency. This is not always the case. If it is too hard more oil must be added and agitation renewed until the desired result is obtained. If it is too soft the difficulty is more troublesome. Solid refined asphalt can not be added to the cement, as experience shows that days are necessary to melt and mix it in homogeneously. It is customary, therefore, to melt the refined asphalt and then add it and agitate. As this is inconvenient it is always desirable to be on the hard side in the first additions of oil and correct any deficiency with more oil. With a finished still of oiled asphalt there must be some disposition made. It is either to remain in the still on storage, go to the dipping kettles for surface mixture, or be furnished to the Cranford Company. If it is allowed to stand any length of time, a few hours even, separation of the oil begins and the top will be found softer than the bottom, this being due also to settling out of mineral matter upon the bottom of the still as has been already noticed. Slow agitation must very necessarily be kept up all the time the still is in use, or being transferred to other points.

Transfer of the contents of a still to the Cranford Company or to storage tanks is brought about by forcing the contents, by means of the air blast, through an outlet at the bottom of the still and an upright pipe into troughs which conduct it where it is desired. Samples collected at different portions of the run are representative of different portions of the still and furnish an opportunity of testing the regularity of the cement in the still. They should all penetrate alike. Much trouble has from time to time been experienced in getting homogeneous cement, but of late, with a new pump, it is not so frequent. When the cement is not homogeneous or of correct penetration it is reworked by the Cranford Company until satisfactory. They use the penetration machine with success and approve its working when combined with other empirical tests, such as chewing, smoothness, and tenacity. As an example of refining and oiling of a still of crude asphalt the following report will serve.

Record of Still No. 2, Barber Asphalt Paving Company.

Charged July 11, 123,500, cargo *J. B. Coyle*.

Off July 15.

Oiled July 16, 13,910, Solar oil, cars 7323 and 1879.

Agitated fifteen hours. Per cent of oil to crude, 11.26; penetration at still, 80°; at Cranford's, 65°.

Asphalt cement to Cranford, 87,143; asphalt cement, barreled, estimated, 1,500.

Bottoms and loss, 48,767, per cent 39.5, of which bottoms average 6 to 9 per cent.

From the refined asphalt the loss is of course confined to bottoms and volatilization. In two experiments the percentage of bottoms or sediment under such circumstances in the large stills was 6.3 and 5.9 per cent, and in another in a small upright still it was 8.7 per cent of the refined asphalt employed. The amount of course varies with the power of the air blast and its ability to keep the coarser mineral matter in suspension.

CONSISTENCY OF ASPHALT CEMENT.

What a desirable consistency may be for asphalt cement is not at all a fixed fact. Practice has varied a great deal in this city and all over the country, and the variations have been the outcome of different conditions. The nature of the oil in use has been, in my opinion, the largest factor influencing this feature of the paving industry. When cements first began to be regulated by penetration as well as empirical tests in 1889, the standard for resurfacing Pennsylvania avenue was fixed at an average of 78°. The oil then in use was from Lima, Ohio; was very rich in hard paraffins, had little light oil, became very hard at low temperatures, but was very liquid at high. The pavement being laid in the summer months the cement was accommodated to the characteristics of the oil at the warmest season of the year and made as soft as we dared, then being acquainted with the character of the oil insufficiently to know how hard such a cement would become at low temperatures. The result was that while the avenue is a magnificent summer surface it shows a slight tendency to scale in winter in some cold, hard places, the cement at that season, losing its elasticity and cementing power, allows water to penetrate between the grains of sand, which, freezing, scales off the surface, as is seen at times with building stones.

The following year, to avoid this error, the penetrations of the cements in use were raised to 90°, but at the same time the character of the oil changed entirely, and these cements were too soft, marking very freely.

Now a return has been made to 80° as a suitable point with the oil in use, which is soft enough at this figure to give a good winter surface.

It is thus seen how closely the character of the oil regulates that of the cement and surface, and how important it must be to have a uniform and desirable supply, and a knowledge of what results it will give derived from extended experience. With frequent changes, and a supply of one oil one month, another a different one, it is extremely difficult to obtain uniform results. It is to be hoped that the present attempts to secure a good and uniform residuum may succeed, as such a result would surely add vastly to the success of the paving industry.

SURFACE MIXTURE.

There remains, after the assembling of suitable material such as has been described, merely their proper mixture for the production of surface material to be laid upon the street.

There has been no essential change in this direction during the past year except the replacement of part of the Barber Company's plant already mentioned, and an increase in the amount of cement in use during the latter part of the year owing to the decreased penetration decided upon with the lighter oil.

The Cranford Company has laid nearly a uniform surface during the year.

The Barber Company has gone to a greater extreme with the surfaces on Thirty-fourth street and thereabouts laid in the autumn of 1890, which are very soft, but now entirely satisfactory for streets with light traffic. In one place this soft surface has been laid on a gradient of 1 in 9 without any signs of motion, and I believe it will prove entirely satisfactory.

The percentages of bitumen at various times in surface mixtures of the two contracts, in extreme and average, are here given:

Per cent of bitumen in surface mixture.

Date.	Cranford Company.			Barber Company.		
	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.
1890.						
October.....		9.79	9.61	9.96	10.69	9.13
November.....	10.01	11.22	9.72	9.99	10.39	9.53
December.....	9.83	10.45	9.36	9.92	10.42	9.55
1891.						
January.....		10.11	9.52			
February.....						
March.....	10.06	10.98	9.42			
April.....	9.73	10.84	9.30			
May.....	10.12	11.60	9.10	9.78	10.13	9.65
June.....	10.33	10.89	9.49		9.42	

Considering the large number of analyses, the variations are very narrow, and are due to lack of closeness in gauging and draining the asphalt cement into the mixer.

INSPECTION.

The usual inspection of the works has been in force, and daily reports from both contractors' yards made by John A. E. Moroney, these reports being filed in my office and used in making out the historical data in regard to each piece of pavement.

RECORD.

Within the past year an attempt has been made to collect and tabulate in a record book all the available data in regard to each piece of surface laid, so that at any future time, by reference to this record, an understanding can be reached as to the desirable qualities of any particular street or the cause of any defect discovered.

Examples of such record sheets are here given for several new pavements and re-surfaces during the past fiscal year.

Locality.	Laid.	Base.	Cement.	Binder.	Penetration.			Per cent of bitu- men.			Penetration.			Residuum.				Pounds per 100 crude.
					Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Brand.	Flows.	Flashes.	10 hours at 400°.	
F st. NW., between 9th and 12th, north side.	Aug. 6-7	Resurf.			o	o	o	9.69	9.21		o	91	83	Lima	o			
All of F st. NW., be- tween 14th and 15th.	Aug. 9-11	do						10.13	9.24	*9.69	90	73		do				
F st. NW., between Nos. 930 and 1000, south side.	Aug. 12	do						9.51			76	74		do				
F st. NW., between 10th and 12th, south side.	Aug. 13							9.67	8.52		76			do				
F st. NW., between Nos. 900 and 930, south side.	Aug. 14							10.00			105			do	75			11
Crossing at F and 11th sts. NW.	Aug. 14													do				
F st. NW., between 12th and 14th, south side.	Aug. 15	Repairs						9.85	9.77		108			do	75			
F st. NW., between 12th and 13th, north side.	Nov. 22	do		Asphalt.	127					(†)	120	93	102	Lima and Baltimore.	38-18			14.2
All of 13th st. SW., between Md. ave. and C.	Aug. 16	Resurf.						10.48	10.40	10.44	95	85	88	Lima	75			11
All of 13th st. SW., between C and B.	Aug. 18	do						10.04	9.62		86	84						
All of 8th st. NW., between N st. and No. 1228.	Aug. 18	do						10.04	9.62		84			Lima	75			
All of 8th st. NW., between No. 1228 and M st.	Aug. 19										90			do	75			
All of 8th st. NW., between M st. and No. 1116.	Aug. 21							9.52		(‡)	90			do	75			

* Cement; insufficiently agitated.

† Irregular; too soft.

‡ Cold.

Locality.	Laid.	Base.	Cement.	Binder.	Penetration.			Top.	Per cent of bitu- men.			Penetration.			Residuum.				Car No.	Pounds per 100 crude.	
					Highest.	Lowest.	Average.		Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Brand.	Flows.	Flashes.	10 hours at 400°.			
All of 8th st. NW., between No. 1116 and L st.	Aug. 22					o	o	o		9.99		94	o	o	o	Lima	75				
All of 10th st. NW., between N. Y. ave. and K.	Aug. 22-23	Resurf.								10.47	9.99	94	85			do	75				11
15th st. NW., Mc- Pherson Square, west side.	Aug. 23	do								10.47		84				do	75				11
Pa. ave. NW., be- tween 1st st. and No. 125, south side.	Sept. 20	do	Hydraulic	Tar	97			Asphalt		9.47		78				Scranton and Lima.	60		{ 13484 4207 }		13
Pa. ave. NW., be- tween Nos. 125 and 207.	Sept. 22									9.47		84	80			Lima	50				13
Pa. ave. NW., No. 207.	Sept. 23									10.44		97	96			do	50				13
Pa. ave. NW., No. 125, tangent.	Oct. 4				85					10.05		95				do	50				14.1
Pa. ave. NW., No. 111 11th st.	Oct. 9									10.33		100				do	50				12.8
Pa. ave. NW., 11th st., blocks.	Oct. 10	Bitumen	Tar							9.77		96				do	50				12.8
R st. NW., between 16th and 17th and Nos. 1719 and 1725.	Oct. 1	do	do		124				(*)	10.09		84				Scranton and Lima.	65-50		6	{ 12.3 14.1 }	
R st. NW., between Nos. 1719 17th st. and No. 1725 to alley.	Oct. 10									10.17		86	85			Lima	50				12.8
R st. NW., between alley and N. Hamp- shire ave.	Oct. 11									10.71		87	86			do	50				12.8
All of 21st st. NW., between Q st. and No. 1520.	Aug. 26	Resurf.						Asphalt		9.46		90	88			do	60		1730		13.3
21st st. NW., between No. 1520 and 91 feet south of P st.	Aug. 27									10.09		98				do	75		{ 12185 5039 }		

OLD SURFACES.

It is unfortunate that we are not in possession of a complete record, such as I have given, of all the streets of the city for the past fifteen years. Such data when studied in connection with the practical results upon the street would no doubt furnish much information which would enable us to avoid errors made in the past and which can not now be explained, and at the same time would be authority for such method of work as has produced the best surfaces.

A study of the old surfaces as they now exist, without such data, indicates however that the deterioration of asphalt surface is due to (1) poor oxidized asphalt, overflow; (2) poor, overheated asphalt, injured in refining; (3) poor residuum oil; (4) insufficient agitation; (5) improper proportions of residuum and asphalt; (6) improper proportions of cement and sand; (7) loamy sand.

All these deficiencies we now endeavor to avoid and with wonderful success, considering past efforts, and where these defects are not found the best surfaces seem to be those containing the most bitumen. It is my opinion therefore that in our climate at least the best surface can be obtained when the per cent of bitumen in it is large and its consistency rather hard.

Respectfully submitted.

CLIFFORD RICHARDSON,
Chemist, Inspector of Asphalt and Cements.

The ENGINEER COMMISSIONER, etc.

REPORT OF THE INSPECTOR OF GAS AND METERS.

OFFICE OF THE U. S. INSPECTOR OF GAS AND METERS,
Washington, D. C., September 5, 1891.

GENTLEMEN: I have the honor herewith to submit the annual report of this office, showing its operations for the fiscal year ending June 30, 1891.

At its commencement will be found condensed tables giving the illuminating power and purity of the gas furnished by the gas companies during the year.

Full monthly statements will be found in Tables A and B. In the remaining tables, lettered C, D, E, and F, the monthly inspection of meters and the pressure of the gas are fully stated.

Very respectfully, your obedient servant,

S. CALVERT FORD,
Inspector of Gas and Meters.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

ILLUMINATING POWER AND PURITY.

The illuminating power and purity of the gas supplied by the Washington Gas-light Company from June 24, 1890, to June 23, 1891, were as follows:

Average illuminating power during the year.....	candles..	17.85
Highest illuminating power during the year	do.....	20.90
Lowest illuminating power during the year	do.....	15.74

On November 13, 1890, the highest candle power was found.

On August 18, 1890, the lowest candle power was found.

Average quantity of ammonia in 100 cubic feet during the year.....	grains..	1.88
Highest quantity of ammonia in 100 cubic feet during the year.....	do.....	5.27
Lowest quantity of ammonia in 100 cubic feet during the year.....	do.....	.34

On July 31, 1890, the highest quantity was found.

On November 12, 1890, the lowest quantity was found.

Average quantity of sulphur in 100 cubic feet during the year	grains..	8.80
Highest quantity of sulphur in 100 cubic feet during the year	do.....	21.71
Lowest quantity of sulphur in 100 cubic feet during the year	do.....	3.02

On July 17, 1890, the highest quantity was found.

On February 14, 1891, the lowest quantity was found.

DEFAULTS DURING THE YEAR.

The gas supplied by the Washington Gaslight Company was on two occasions of less illuminating power than 16 candles.

On one occasion the quantity of ammonia found exceeded the 5 grains allowed.

On one occasion the quantity of sulphur found exceeded the 20 grains allowed.

PRESSURE OF THE GAS.

The pressure of the gas supplied by this company, as registered in the inspector's office, Post building, corner Tenth and D streets NW., during the hours that street lamps were lighted, from July 1, 1890, to June 30, 1891, was as follows:

Average pressure	inches..	1.29
Highest pressure	do....	2.05
Lowest pressure	do....	.71

On April 25, 1891, the highest pressure was registered.

On July 13, 1890, the lowest pressure was registered.

SPECIFIC GRAVITY OF THE GAS.

The specific gravity of the gas supplied by the Washington Gaslight Company was as follows:

Average specific gravity	.625
Highest specific gravity	.698
Lowest specific gravity	.542

The illuminating power and purity of the gas supplied by the Georgetown Gaslight Company from June 24, 1890, to June 23, 1891, were as follows:

Average illuminating power during the year	candles..	16.92
Highest illuminating power during the year	do....	19.58
Lowest illuminating power during the year	do....	14.33

On June 12, 1891, the highest candle power was found.

On November 29, 1890, the lowest candle power was found.

Average quantity of ammonia in 100 cubic feet during the year	grains..	2.33
Highest quantity of ammonia in 100 cubic feet during the year	do....	11.72
Lowest quantity of ammonia in 100 cubic feet during the year	do....	.40

On October 20, 1890, the highest quantity was found.

On January 7, 1891, the lowest quantity was found.

Average quantity of sulphur in 100 cubic feet during the year	grains..	13.94
Highest quantity of sulphur in 100 cubic feet during the year	do....	20.87
Lowest quantity of sulphur in 100 cubic feet during the year	do....	7.09

On March 13, 1891, the highest quantity was found.

On October 15, 1890, the lowest quantity was found.

DEFAULTS DURING THE YEAR.

The gas supplied by the Georgetown Gaslight Company was on five occasions of less illuminating power than 16 candles.

On seven occasions the quantity of ammonia found exceeded the 5 grains allowed.

On two occasions the quantity of sulphur found exceeded the 20 grains allowed.

PRESSURE OF THE GAS.

The pressure of the gas supplied by this company as registered in the inspector's office, No. 1338 Thirty-second street, Georgetown, during the hours that street lamps were lighted from July 1, 1890, to June 30, 1891, was as follows :

Average pressure	inches..	1.46
Highest pressure	do....	3.83
Lowest pressure	do....	.70

On May 1, 1891, the highest pressure was registered.

On August 23, 1890, the lowest pressure was registered.

SPECIFIC GRAVITY OF THE GAS.

The specific gravity of the gas supplied by the Georgetown Gaslight Company was as follows:

Average specific gravity.....	.452
Highest specific gravity.....	.477
Lowest specific gravity.....	.428

INSPECTION OF METERS.

One thousand four hundred and sixty-eight meters were inspected and proved by this office from June 24, 1890, to June 23, 1891.

With the exception of one meter inspected and proved for the Alexandria Gas Works, the above number was inspected and proved for the Washington and Georgetown Gaslight Companies and for consumers of gas in Washington and Georgetown.

The results of inspection were as follows: Seventy-one registered fast, average error 4.92 per cent; 63 registered slow, average error 5.37 per cent; 1,329 registered within the limits allowed by law, namely, 2 per cent either way, and 4 did not register the gas flowing through them.

One hundred and fifty-five of the above-mentioned meters were inspected and proved on complaint. One hundred and thirty were complained of by consumers of gas. Of this number 57 registered fast, average error 4.59 per cent; 33 registered slow, average error 5.21 per cent; 39 registered within the limits allowed, namely, 2 per cent either way, and 1 did not register the gas flowing through it.

Twenty-five were complained of by the gas companies, 4 registered fast, average error 7.01 per cent; 11 registered slow, average error 6.35 per cent; 7 registered within the limits allowed, and 3 did not register.

FEES.

The sum of \$734 was received as fees for meter inspections from June 24, 1890, to June 23, 1891, and paid to the collector of the District of Columbia, to be placed to the credit of the United States and District of Columbia in equal parts.

The gas supplied by the Washington Gaslight Company during the year ending June 23, 1891, averaged 17.85 standard candles; this is practically 2 candles in excess of the required standard, namely, 16 candles.

On two occasions the illuminating power was found to be slightly less than 16 candles, the lowest candle power being 15.74, "one-fourth of one candle," in a consumption of 5 cubic feet per hour. This deviation would hardly be observed under ordinary conditions of using gas.

On one occasion the gas was found to contain twenty-seven one hundredths of 1 grain of ammonia in excess of the 5 grains allowed, and 1.71 grains of sulphur in excess of the 20 grains allowed.

This record compares favorably with the illuminating power and purity of the gas supplied by this company during the previous year, when the candle power averaged 18 candles, and no defaults in illuminating power occurred.

The gas supplied by the Georgetown Gaslight Company during the year ending June 23, 1891, averaged 16.92 standard candles; this is nearly 1 candle above the required standard.

The illuminating power was found to be less than 16 candles on five occasions. With the exception of the default reported on November 29, 1890, when the illuminating power was only 14.33 candles, the illuminating power on the other four occasions was not less than 15.78 and averaged 15.86 candles, which are considered very slight deviations.

On seven occasions an excess of ammonia over the 5 grains allowed was found the largest quantity, being 11.72 grains, the average quantity during the period that the excess existed was 7.62 grains in each 100 cubic feet.

The quantity of sulphur found on two occasions was slightly in excess of the 20 grains allowed, namely forty-eight one hundredths and eighty-seven one hundredths of 1 grain.

The number of defaults reported against this company during the year ending June 23, 1891, was four less than occurred during the previous year.

The above is a good record compared with previous years, and it is probable after the improvements now in progress at the works of this company are completed, failures in the candle power and purity standards will be of rare occurrence.

It is desirable that the illuminating power, purity, and pressure of the gas supplied by the Washington Gaslight Company from its different sources of supply be ascertained as soon as practicable.

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 363

I therefore renew the recommendation made in the annual report of this office for the year 1889, that a laboratory be established in the vicinity of the new gas works in Southeast Washington, and provided with the necessary instruments for inspection.

The recommendations made in former reports of this office, relative to the appointment of an assistant inspector, and modifications in the clauses of the act regulating the inspection of meters are again submitted for consideration.

A.—Report of the illuminating power and purity of the gas supplied by the Washington Gaslight Company from June 24, 1890, to June 23, 1891.

Months.	Number of observations.*	Illuminating power in sperm candles.			Quantity of ammonia in 100 cubic feet.			Quantity of sulphur in 100 cubic feet.		
		Mean.	Highest.	Lowest.	Mean.	Highest.	Lowest.	Mean.	Highest.	Lowest.
					Gr'ns.	Grains.	Grains.	Grains.	Grains.	Grains.
July	25	17.21	18.86	16.10	3.91	4.93	3.23	11.40	21.71	7.83
August	27	17.42	19.29	15.74	2.32	5.27	.51	10.85	15.80	8.24
September	26	17.68	18.78	16.48	2.01	3.40	.68	9.90	12.36	5.77
October	26	17.23	19.59	15.87	2.00	3.40	.68	9.70	15.11	6.87
November	26	17.86	20.90	16.18	.82	1.70	.34	9.16	13.74	6.87
December	25	18.24	20.31	16.18	1.21	2.72	.34	7.60	11.26	4.67
January	23	18.78	20.60	16.40	1.96	3.40	.51	7.98	13.46	5.49
February	22	18.18	19.14	17.37	.47	4.08	.34	6.66	9.08	3.02
March	24	17.79	18.59	16.84	1.56	2.38	.68	7.86	10.71	5.49
April	27	17.84	19.50	16.54	1.47	3.40	.34	7.38	9.89	4.39
May	26	18.38	19.34	16.95	2.99	4.67	1.36	7.57	9.06	4.12
June	25	17.62	18.86	16.00	1.94	2.72	1.02	9.57	12.36	7.41
Total ..	302	214.23	.....	.....	22.66	.....	.....	105.63	.....	.....

AVERAGE FOR THE YEAR.

Illuminating power in sperm candles:

Mean of 302 observations*	17.85
Highest (November 13, 1890)	20.90
Lowest (August 18, 1890)	15.74

Quantity of ammonia in 100 cubic feet:

Mean	Grains. 1.88
Highest (July 31, 1890)	5.27
Lowest (November 12, 1890)	.34

Quantity of sulphur in 100 cubic feet:

Mean	8.80
Highest (July 17, 1890)	21.71
Lowest (February 14, 1891)	3.02

On two occasions the illuminating power of the gas was less than 16 candles. On one occasion the quantity of ammonia found exceeded the 5 grains allowed. On one occasion the quantity of sulphur found exceeded the 20 grains allowed.

B.—Report of the illuminating power and purity of the gas supplied by the Georgetown Gaslight Company from June 24, 1890, to June 23, 1891.

Months.	Number of observations.*	Illuminating power in sperm candles.			Quantity of ammonia in 100 cubic feet.			Quantity of sulphur in 100 cubic feet.		
		Mean.	Highest.	Lowest.	Mean.	Highest.	Lowest.	Mean.	Highest.	Lowest.
					Gr'ns.	Grains.	Grains.	Grains.	Grains.	Grains.
July	25	17.36	19.55	16.01	2.14	3.87	1.31	8.33	9.58	7.31
August	27	17.07	18.75	16.00	1.76	3.14	1.00	8.22	9.61	7.69
September	26	16.57	17.73	15.90	1.32	2.09	.51	11.47	15.30	5.56
October	26	16.54	17.66	16.08	4.23	11.72	1.65	13.22	17.16	7.09
November	26	16.59	17.49	15.96	3.35	6.26	1.82	15.51	17.21	13.74
December	25	16.46	17.51	14.33	1.45	1.97	1.09	17.20	20.48	15.28
January	23	17.19	19.05	16.29	.64	1.16	.40	16.93	19.16	14.09
February	22	16.72	17.42	16.03	1.61	3.05	.58	16.99	18.58	14.29
March	24	17.10	18.84	16.15	1.25	2.16	.73	17.86	20.87	15.89
April	27	16.84	18.44	15.78	2.58	4.59	1.83	14.13	16.79	11.26
May	26	17.07	19.18	16.03	3.53	5.35	2.56	14.58	17.13	12.53
June	24	17.53	19.58	16.00	4.15	5.45	3.12	12.94	14.31	12.05
Total	301	203.04	.....	.....	28.01	.....	.....	167.38	.....	.....

* Each observation consists of twenty readings on the Bunsen photometer, at intervals of one minute.

▲VERAGE FOR THE YEAR.

Illuminating power in sperm candles:

Mean of 301 observations*	16.92
Highest (June 12, 1891)	19.58
Lowest (November 29, 1890)	14.33

Quantity of ammonia in 100 cubic feet:

	Grains.
Mean	2.33
Highest (October 20, 1890)	11.72
Lowest (January 7, 1891)	.40

Quantity of sulphur in 100 cubic feet:

Mean	13.94
Highest (March 13, 1891)	20.87
Lowest (October 15, 1890)	7.09

On five occasions the illuminating power was less than 16 candles. On seven occasions the quantity of ammonia found exceeded the 5 grains allowed. On two occasions the quantity of sulphur found exceeded the 20 grains allowed.

C.—Report of meters inspected and proved for the Washington Gaslight Company and for consumers of gas in Washington, from June 24, 1890, to June 23, 1891.

Months.	Meters tested.	New meters for company.						Repaired meters for Co.		Consumers' meters on complaint of consumers.						Consumers' meters on complaint of company.						
		Total.	Fast.		Slow.		Correct.	Total.	Correct.	Total.	Fast.		Slow.		Correct.	Total.	Fast.		Slow.		Correct.	Did not register.
			No.	P. ct.	No.	P. ct.					No.	P. ct.	No.	P. ct.			No.	P. ct.	No.	P. ct.		
July ..	104	94	1	3.00	2	4.03	91	5	5	5	4	2.87	1	4.84	..	..	..	..	..	..	..	..
Aug ..	110	109	1	3.62	2	3.56	106	1	1	..	..	..	..	..	..	..	..	..	..	..	..	
Sept ..	135	128	2	3.06	6	3.81	120	4	4	3	1	3.56	1	2.50	1	..	..	..	..	..	..	
Oct ..	110	106	..	..	3	3.77	103	2	2	2	1	8.16	1	4.83	..	..	..	..	..	..	..	
Nov ..	75	66	..	..	..	..	66	1	1	8	3	4.12	2	4.70	3	..	..	..	..	..	..	
Dec ..	109	98	..	..	3	3.22	95	2	2	8	1	6.50	1	7.75	6	1	..	..	1	4.31	..	
Jan ..	91	67	..	..	1	3.41	66	5	5	16	8	4.86	4	4.37	4	3	1	9.83	..	..	1	1
Feb ..	69	30	..	..	..	..	30	12	12	27	12	4.13	6	4.62	9	..	..	..	..	..	1	
Mar ..	101	72	..	..	..	..	72	18	18	11	4	4.35	2	6.33	4	..	..	..	..	..	..	
Apr ..	121	108	1	2.75	..	..	107	7	7	6	4	7.35	2	4.66	..	..	..	..	..	..	..	
May ..	93	81	3	2.58	..	..	78	5	5	7	2	6.16	2	3.37	3	..	..	..	..	..	..	
June ..	109	107	1	5.16	..	..	106	2	2	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	1,227	1,066	9	*3.36	17	†3.83	1,040	64	6.4	93	40	‡5.20	22	‡4.79	30	4	1	‡9.83	1	‡4.31	1	‡1

¹ Average per cent.² Per cent.³ 1 complaint of consumer.

During the fiscal year ending June 30, 1891, this office inspected and proved for the Washington Gaslight Company and for consumers of gas in Washington 1,227 meters, of this number 50 registered fast; average error, 6.13 per cent; 40 registered slow; average error, 4.24 per cent; 1,135 registered within the limits allowed by law, namely, 2 per cent either way, and two did not register the gas flowing through them. One meter was inspected for the Alexandria Gas Works.

* Each observation consists of twenty readings on the Bunsen photometer at intervals of one minute.

D.—Report of meters inspected and proved for the Georgetown Gaslight Company and for consumers of gas in Georgetown, from June 24, 1890, to June 23, 1891.

Months.	Meters tested.	New meters for Co.		Repaired meters for company.					Consumers' meters on complaint of consumers.					Consumers' meters on complaint of company.								
		Total.	Correct.	Total.	Fast.		Slow.		Correct.	Total.	Fast.		Slow.		Correct.	Total.	Fast.		Slow.		Correct.	Did not register.
					No.	P. ct.	No.	P. ct.			No.	P. ct.	No.	P. ct.			No.	P. ct.	No.	P. ct.		
July																						
Aug																						
Sept																						
Oct	36	24	24	12			1	7.50	11													
Nov	58	19	19	22			1	3.50	21						17	3	4.19	7	7.23	5	2	
Dec	17			11					11	3	2	3.31	1	6.50	3			2	12.87	1		
Jan	20	10	10							10	5	5.24	1	6.75	4							
Feb	32	15	15	6					6	10	5	3.39	3	3.92	2	1		1	5.12			
Mar	31			25	1	3.00			24	6	2	3.15	3	5.06	1							
Apr	3									3	2	4.66			1							
May	15	13	13							2	1	4.16			1							
June	28	25	25							3			3	6.05								
Total	240	106	106	76	1	*3.00	2	†5.50	73	37	17	†3.98	11	†5.64	9	21	3	*4.19	10	†8.40	6	2

* Per cent. † Average per cent.

During the fiscal year ending June 30, 1891, this office inspected and proved for the Georgetown Gaslight Company and for consumers of gas in Georgetown 240 meters; of this number 21 registered fast, average error 3.72 per cent; 23 registered slow, average error 6.51 per cent; 194 registered within the limits allowed by law, namely, two per cent either way, and two did not register the gas flowing through them.

E.—Report showing the pressure of the gas supplied by the Washington Gaslight Company, as registered in this office, Post building, corner Tenth and D streets, from July 1, 1890, to June 30, 1891.

Months.	Mean.	Maximum.	Minimum.
	Inches.	Inches.	Inches.
July	1.20	1.46	.71
August	1.43	1.73	1.05
September	1.38	1.70	.92
October	1.29	1.74	.88
November	1.35	2.00	1.05
December	1.29	2.00	1.01
January	1.32	1.85	1.05
February	1.30	1.90	1.06
March	1.32	1.79	1.04
April	1.26	2.05	.85
May	1.23	1.77	.99
June	1.15	1.45	.82
	15.52		

Average mean pressure	Inches. 1.29
Maximum pressure (April 25, 1891)	2.05
Minimum pressure (July 13, 1890)	.71

The above record represents the actual pressure of the gas furnished by this company during the hours that street lamps were lighted.

F.—Report showing the pressure of the gas supplied by the Georgetown Gaslight Company, as registered in this office, No. 1338 Thirty-second street, Georgetown, from July 1, 1890, to June 30, 1891.

Months.	Mean.	Maximum.	Minimum.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
July.....	1.60	2.09	1.15
August.....	1.49	2.40	.70
September.....	1.32	2.11	.98
October.....	1.45	2.22	.99
November.....	1.38	2.30	.92
December.....	1.40	2.68	.95
January.....	1.35	2.30	1.05
February.....	1.41	2.17	1.04
March.....	1.42	2.30	1.03
April.....	1.57	2.86	1.11
May.....	1.65	3.83	1.12
June.....	1.58	3.28	1.25
	17.62		

	<i>Inches.</i>
Average mean pressure.....	1.46
Maximum pressure (May 1, 1891).....	3.83
Minimum pressure (August 23, 1890).....	.70

The above record represents the actual pressure of the gas furnished by this company during the hours that street lamps were lighted.

REPORT OF SUPERINTENDENT WATER DEPARTMENT.

WASHINGTON, D. C., November 27, 1891.

SIR: I have the honor to submit the following report of the extension and maintenance of the distribution branch of the water department for the fiscal year ending June 30, 1891.

The increase in the water supply for Washington and Georgetown from the 48-inch main and its connections continues to maintain a sufficient head of water in the area supplied by the gravity system; but in the more elevated portions of the northern section of the city the level at which the water was delivered at the commencement of the present year has gradually fallen, due to the rapid extension of the distribution system, the steady increase in the consumption, and the excessive waste that is constantly going on.

Since the completion of the 24 and 30 inch mains by the United States—24-inch mains on Eleventh street NW., from K to U, and on K from New Jersey avenue to Eleventh street NE., and the 30-inch main on New Jersey avenue NW., from B to L, for increasing the supply on Capitol Hill—the head of water in the distributing mains in the vicinity of Eleventh and N and Eleventh and O streets NW., is somewhat greater, but in the northeastern section of the city and on Capitol Hill has been considerably increased.

Complaints from any location received attention, and where possible relief was promptly given. How to prevent the willful waste of water continues to be a serious problem.

The meter system has been resorted to in some cities, recording the actual flow of water into each premises; this can undoubtedly be effected where a supply of water is delivered in a state of transparency and nearly free from sediment. Potomac water is frequently in a turbid condition, and at all times the distribution mains contain minute particles of sand, pebbles, disintegrated rock, small fish, and shells, which are constantly being borne forward from the receiving reservoir. A more effectual system for flushing the mains would remove a considerable quantity of extraneous matter from them, increase their capacity, and improve the quality of water delivered to premises; the present condition, however, is likely to continue until large alternate settling reservoirs are provided to give both time and surface for the clarification of the water supply before entering the delivery mains.

The work of changing locations of old water mains and laying new ones for the Washington and Georgetown Railroad Company on Fourteenth street and Georgetown and navy-yard lines to make room for cable conduits and wheel pits, has progressed favorably. In many places it was necessary to lay new mains at the sides of the con-

duits and abandon old mains between the car tracks to avoid crossing the lines with service pipes for premises. This work has been done wholly at the expense of the railroad company, and has been the means of correcting many defects in the old system of water mains along the lines of the new cable roads.

The pumping engines and boilers at the U street station have been thoroughly overhauled and are in a satisfactory condition. Since the 12-inch main was laid from the standpipe on Sixteenth street extended to Columbia avenue, and on Fourteenth street extended to Mount Pleasant, with its distributing branches—the Gaskill engines have delivered into the standpipe at intervals daily and the water level carried at or near the overflow—the supply of water to premises in the Washington high-service area has been generally satisfactory.

The average quantity of water drawn daily from the gravity supply and delivered into the standpipe has been 376,130 gallons. When the pumping engines were not in operation they were held in readiness to deliver into the standpipe in case of fire in the area supplied from it.

The pumping engines and boilers at the Georgetown station have been kept in good repair. The high-service area in Georgetown, supplied by the delivery main from the pumping engines and the storage reservoir at Thirty-second and U streets, has received its proportion of water, except in more elevated parts, from which complaint was made for want of water in the second stories to premises, due to the condition of the storage reservoir which rendered it unsafe to carry the water level to a greater height than 13 feet.

There are a number of improvements that could be made at both pumping stations and to the connecting receiving and delivery mains, but as the necessity each year is becoming greater for a large pumping station to take their place, to meet the present and future demands for an extended high-service water supply in the elevated environs of Washington and Georgetown, I do not think it would be advisable to expend more than is actually necessary to keep the present high-service pumping machinery in a serviceable condition.

There are now 1,157 fire hydrants in service. Seventy-two improved hydrants have been erected and 917 repairs made to old hydrants within the year. There are three different designs of McClelland hydrants in service. Many of them have 2½-inch outlet nozzles (the standard being 2½ inches), rendering it necessary for each fire engine to carry a special coupling.

A large number of these hydrants have been in use since the introduction of the water supply. They are frequently out of order and require careful attention on the part of the water department to keep them in a condition for service.

There are now 287 public hydrants in use. Twelve improved hydrants have been erected in new locations and 34 in place of old ones. Seven have been removed and abandoned. Six hundred and eighty-two repairs made to hydrants within the year.

These hydrants are used largely by the poor people who are unable to have Potomac water introduced into premises. These people have to depend on hydrants and pumps for a supply of water. A considerable number of these hydrants are nearly worn out and require constant attention. They should be replaced with improved hydrants as soon as the funds of the water department will permit. There are 41 animal drinking fountains in service, 2 of which were provided by the Humane Society and erected by the water department; 133 repairs have been made to these fountains during the year and much attention given to keeping them in a proper condition.

The present number of animal fountains is wholly inadequate, as animals often suffer during the heated term owing to the scarcity of fountains. I renew my recommendation of last year, that an annual appropriation of \$2,000 be provided for the purchase of, replacement, and repairs of drinking fountains for animals. The object is one that should at least receive favorable consideration.

There are 264 public pumps in the District. Two new pumps have been erected in new locations, the wells having been sunk at the expense of property-owners; 31 pumps in place of old ones. Nine have been removed and the wells filled and abandoned after conclusive evidence of their permanent pollution. Three hundred and sixty-three repairs have been made to pumps.

Much attention has been given to the care and preservation of wells in closely settled portions of Washington and Georgetown. The high temperature of Potomac water in summer makes it far from palatable, and to those who are unable to purchase ice the cool well water proves a great blessing. I would urgently renew my recommendation of last year, that the annual appropriation for the purchase of pumps and care of wells be increased to \$6,000, and that \$1,000 of the same be used for sinking wells to a considerable depth by boring and lining them with iron tubing, and erecting pumps adapted to deep-well service. This was recommended by Prof. Clifford Richardson, chemist of the engineer department, in his annual report of 1889.

I would respectfully call your attention to the imperative necessity of increasing

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the number and compensation of the regular employes in the distribution branch of the water department. The present compensation is not commensurate when compared with the difficult duties that they are called upon to perform. The rapid extension of the distribution system requires more than ordinary vigilance at all times on the part of this branch to keep the water service in a reliable condition. I would respectfully recommend the following estimates for compensation of the present and additional employes for the distribution branch for the year ending June 30, 1893:

1 superintendent (\$400 increase)	\$2,000.00
1 draftsman	1,500.00
1 foreman (\$200 increase)	1,400.00
2 assistant foreman (1 additional, \$900 each)	1,800.00
1 clerk (additional)	1,400.00
1 clerk (\$200 increase)	1,200.00
1 timekeeper (\$100 increase)	900.00
1 inspector (additional)	900.00
1 tapper and machinist	900.00
1 assistant tapper	600.00
4 steam engineers (\$1,100 each)	4,400.00
1 extra steam engineer, services, on account of sickness, leaves of absence, and Sundays	540.00
1 blacksmith	750.00
2 plumbers, \$750 each	1,500.00
2 assistant machinists, \$750 each	1,500.00
2 property-keepers (\$336 increase)	1,872.00
6 firemen, \$730 each	4,380.00
2 flushers, \$540 each	1,080.00
1 calker	730.00
3 laborers, \$500 each	1,500.00
1 driver	480.00
1 watchman	480.00
1 hostler	480.00
For the inspection of cast iron, water pipe, and special castings at foundries	2,000.00
	34,292.00

The following tabulated statement will show the details of operation of this department during the year.

Very respectfully, your obedient servant,

H. F. HAYDEN,
Superintendent Water Department.

Capt. WM. T. ROSSELL,
Engineer Commissioner, District of Columbia.

During the year 11,013 feet of 3-inch, 3,142 feet of 4-inch, 58,094 feet of 6-inch, and 5,201 feet of 12-inch cast-iron water-main pipe was laid.

WATER MAINS.

Location.	Street or avenue.	Streets between.	Size of pipe.	Length of main.
			Inches.	Lin. ft.
In alley	Seventh and Eighth	B and C, NE.	3	306
Do.	Sixteenth and Seventeenth.	L and M, NW.	3	389
Do.	Twenty-fourth and Twenty-fifth.	I and K, NW.	3	267
Do.	Sixth and Seventh.	A and B, SE.	3	468
Do.	First and Second	B and C, NE.	3	315
Do.	First and North Capitol.	L and Pierce, NW.	3	373
Do.	Fourth and Fifth.	N and O, NW.	3	268
Do.	Third and Four-and-a-half.	H and I, SW.	3	314
Do.	Fourteenth and Fifteenth.	T and U, NW.	3	789
Do.	First and Delaware avenue.	B and C, NE.	3	527

WATER MAINS—Continued.

Location.	Street or avenue.	Streets between.	Size of pipe.	Length of main.
			Inches.	Lin. ft.
In alley.....	Fourteenth and Fifteenth.	Rhode Island avenue and P, NW.....	3	527
Do.....	Twentieth and Twenty-first.	K and L, NW.....	3	186
Do.....	Thirteenth and Fourteenth.	S and T, NW.....	3	630
Do.....	First and New Jersey avenue.	B and C, SE.....	3	634
Do.....	Twenty-first and Twenty-second.	H and I, NW.....	3	330
Do.....	do	G and H, NW.....	3	473
Do.....	Second and Third.....	K and L, NE.....	3	426
Do.....	Four-and-a-half and Union.	N and O, SW.....	3	169
Do.....	Third and Four-and-a-half.	C and D, SW.....	3	514
Do.....	First and North Capitol.	O and P, NW.....	3	731
Do.....	Ninth and Tenth.....	G and I, SE.....	3	352
Do.....	Twenty-first and Twenty-second.	K and L, NW.....	3	161
Do.....	Twentieth and Twenty-first.	L and M, NW.....	3	429
Do.....	Sixth and Seventh.....	East Capitol and A, SE.....	3	391
Do.....	Twenty-first and Twenty-second.	K and L, NW.....	3	138
Do.....	Nineteenth and Twentieth.	L and M, NW.....	3	795
Do.....	First and Third.....	O and P, NW.....	4	419
Center.....	Elliott street.....	Thirteenth and Fourteenth, Maryland avenue and F, NE.	6	15
Center.....	Union street.....	Four-and-a-half and Sixth, N and O, SW	4	435
In alley.....	Sixth and Seventh.....	Trumbull and College, NW.....	4	639
West side.....	Ninth street.....	Westminster and T.....	4	197
Center.....	Westminster.....	Ninth and Tenth, NW.....	4	810
Do.....	Ward Place.....	Twenty-second and New Hampshire avenue, M and N, NW.	4	489
Do.....	M street.....	Twelfth and Trinidad avenue, NE.....	6	47
South side.....	V street.....	Seventeenth and Florida avenue, NW.....	6	850
East side.....	Florida avenue.....	V and Seaton, NW.....	6	514
Center.....	Seaton street.....	Seventeenth and Florida avenue, NW.....	6	193
North side.....	O street.....	Twenty-first and Twenty-second, NW.....	6	378
Do.....	N street.....	do.....	6	1,107
West side.....	Twenty-first.....	N and O, NW.....	6	1,117
North and south sides.	E street.....	Eighth and Ninth, NE.....	6	465
Do.....	do.....	Fourth and Fifth, NE.....	6	575
Center.....	Trumbull street.....	Sixth to alley, NW.....	6	439
East side.....	Delaware avenue.....	I and K, SW.....	6	150
West side.....	Fifth street.....	C and D, SE.....	6	287
Center.....	Elm street.....	Linden and Harewood.....	6	465
East side.....	Thirteenth street.....	T and U, NW.....	6	405
Center.....	Larch street.....	Maple and Florida avenue, NW.....	6	508
North side.....	Rhode Island avenue.....	Fourteenth and Iowa Circle, NW.....	6	348
East and west sides	Sixth street.....	E and F, NE.....	6	428
Do.....	Eighth street.....	E and F, SW.....	6	900
South side.....	Florida avenue.....	Twelfth and Thirteenth, NE.....	6	680
North and south sides.	M street.....	Sixth and Seventh SW.....	6	449
Do.....	L street.....	do.....	6	364
Center.....	Robinson street.....	Sixth and Seventh, L and M, SW.....	6	681
North side.....	I street.....	Third and Four-and-a-half SW.....	6	681
North and south sides.	D street.....	Sixth and Seventh NE.....	6	1,541
North side.....	Maryland avenue.....	do.....	6	1,541
South side.....	W street.....	Fifteenth and Sixteenth NW.....	6	551
East and west sides	Tenth street.....	F and Maryland avenue NE.....	6	621
East side.....	Connecticut avenue.....	N and Dupont Circle NW.....	6	469
North side.....	L street.....	Fifth and Sixth NW.....	6	294
Center.....	California.....	E and F NE.....	6	294
East side.....	First street.....	Massachusetts and California N E.....	6	1,722
West side.....	Second street.....	E and California NE.....	6	1,722
North side.....	E street.....	First and Second NE.....	6	608
East and west sides	Ninth street.....	B and North Carolina avenue SE.....	6	830
North and south sides.	D street.....	Second and Third SW.....	6	830
Do.....	North Carolina avenue.....	First and New Jersey avenue SE.....	6	250
East side.....	Fifteenth street.....	Rosedale and E NE.....	6	443

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WATER MAINS—Continued.

Location.	Street or avenue.	Streets between.	Size of pipe.	Length of main.
			Inches.	Lin. ft.
West side	Fifteenth street	G and Tennessee avenue	6	571
Do	Tennessee avenue	Fifteenth and F NE		
North and south sides.	G street	Sixth and Seventh NE		
East and west sides	Tenth street	W and Florida avenue NW	6	937
North and south sides.	Massachusetts avenue	Tenth and Eleventh NE	6	702
East side	Third street	B and C SW	6	497
North and south sides.	C street	Eleventh and Twelfth NE	6	770
Center	Twenty-ninth street ..	Canal and Water NW	6	490
East and west sides	Twenty-sixth street ..	F and D NW		
East side	New Hampshire avenue.	G and Twenty-sixth	6	1,661
Do	Twenty-sixth street ..	E and F NW		
Center	Eighth street	U and Grant avenue NW	6	1,422
Do	Grant avenue	Ninth and Florida avenue NW ..	6	609
East and west sides	Sixteenth street	R and S NW	6	860
Center	Acker street	Sixth and Seventh, E and F, NE ..	6	629
East and west sides	Eighth street	I and K NE	6	877
Center	Sixth street	Virginia avenue and K	6	591
North side	K street	Sixth and Seventh SE		
East side	Linden street	Pomeroy and Trumbull	6	1,141
Center	Trumbull street	Linden and Reservoir		
North and south sides.	South Carolina avenue	Tenth and Eleventh SE	6	726
East and west sides	Seventh street	Pomeroy and Grant NW	6	1,465
Center	Park street	Fourteenth and Sixteenth NW ..	6	1,869
East side	Fourteenth street	Park and Columbia	6	1,026
South side	F street	Sixth and Seventh NE	6	648
East and west sides	Ninth street	F and Maryland avenue NE	6	637
Do	Fifth street	C and D SE	6	426
North side	Q street	Twenty-second and Twenty-third NW ..	6	801
East side	Twenty-third street ..	Massachusetts avenue and Q NW ..		
Center	Twelfth street	M and N (extended) NE	6	373
North and south sides.	I street	Eleventh and Twelfth	6	2,280
East and west sides	Twelfth street	H and I NE		
Do	Eleventh street	H and I	6	680
Do	Ninth street	D and Maryland avenue NE		
North and south sides.	K street	Third and New Jersey avenue NW ..	6	700
Center	Valley street	Q and Road NW	6	1,160
North and south sides.	D street	Seventeenth and Eighteenth	6	2,118
East and west sides	Eighteenth street	D and E NW		
North side	Water street	Tenth and Eleventh SW	6	371
East and west sides	Ninth street	E and F SW	6	715
Center	Meridian avenue	Standpipe to Columbia Road NW ..	12	4,100
Do	Columbia Road	Sixteenth to Fourteenth		
West side	Fourteenth street	Columbia to Park NW	6	60
<i>Laid from funds deposited by applicants.</i>				
West side	Fourteenth street	Center Florida avenue NW	6	685
South side	Pennsylvania avenue ..	Twenty-first and Twenty-second NW ..	6	757
Do	do	Twenty-fourth and Twenty-sixth NW ..	6	572
North and south sides.	M street	Twenty-seventh and Twenty-eighth NW ..	6	1,050
South side	do	Thirtieth and Thirty-second NW ..	6	411
West side	Eighth street	D and E SE	6	540
Do	do	E and G SE	12	177
East side	do	Pennsylvania avenue and D SE ..		
Do	do	D and E SE	12	377
Do	do	E and G SE	12	539
Total				73,378

One thousand two hundred and one linear feet of 6-inch cast-iron pipe was used in the erection of new fire hydrants.

Intersections laid on streets specified to be improved.

Location.	Size of pipe.	Length of main.
	Inches.	Lin. ft.
Center Ninth and C streets NE.....	6	83
Center Ninth and D streets NE.....	6	161
North side Ninth street and Maryland avenue NE.....	6	72
South side Ninth street and Maryland avenue NE.....	6	40
Corner Eighteenth and Corcoran streets NW.....	6	33
South side Ninth and B streets NE.....	6	66
Corner North Capitol and R streets (extended) NW.....	6	154
Corner First and R streets (extended) NW.....	6	119
Corner New York avenue and North Capitol street.....	6	112
Corner New York avenue and N street.....		
Corner New York avenue and First street.....		
Corner First and P streets NW.....	6	48
Corner Fourth and R streets NW.....	6	63
East side Fourth street, between N and O, NW.....	6	54
Corner Second and G streets SW.....	6	98
Corner Fifth and C streets SE.....	6	21
Corner Third and F streets NE.....	6	39
Corner Third and G streets NE.....	6	123
Corner Fourteenth and B streets SW.....	6	36
South side F street, center Ninth, NE.....	6	42
East and west sides Nineteenth and R streets NW.....	6	103
Corner Spruce and Linden streets NW.....	6	10
Corner Third and R streets NW.....	6	120
Corner Thirty-second and N streets NW.....	6	8
Corner Eighteenth and Vernon streets NW.....	6	643
Corner Eighteenth and California streets NW.....		
Corner Eighteenth and Wyoming streets NW.....		
Corner Eighteenth and Kalorama streets NW.....	6	64
Corner Eighteenth and Belmont streets NW.....		
Corner Eighteenth street and Columbia Road NW.....		
Corner Third street and Massachusetts avenue NW.....	6	131
Corner Fourteenth and Binney streets NW.....		
Corner Fourteenth and Princeton streets NW.....		
Corner Fourteenth and Bacon streets NW.....		
<i>Intersections and connections laid at expense of applicants.</i>		
Fourteenth and B streets SW.....	3	23
H street, between Thirteenth and Fourteenth, NW.....	3	3
Twenty-third street, between I and K, NW.....	3	4
Fifteenth and H streets NW.....	3	24
Thirteenth street, between G and H NW.....	3	27
Center G street, between Thirteenth and Fourteenth, NW.....	3	30
New Jersey avenue and D street NW.....	4	87
Twenty-fourth and M streets NW.....	6	5
G street, between Seventeenth and Eighteenth, NW.....	6	4
North Capitol street, between C and D, NW.....	6	94
Center H street, between Seventeenth and Eighteenth, NW.....	6	25
Twenty-sixth street and Pennsylvania avenue NW.....	6	94
Twenty-fourth street and Pennsylvania avenue NW.....	12	8
Total.....		2,871

Four-way branches connected to water mains.

Location.	No.	Size.
		Inches.
In alley between Sixteenth and Seventeenth, L and M NW.....	1	3 by 3
In alley between Fourth and Fifth, N and O streets NW.....	1	3 by 3
In alley between Nineteenth and Twentieth, L and M NW.....	1	3 by 3
In alley between Third and Four-and-a-half, H and I streets SW.....	1	3 by 3
In alley between Fourteenth and Fifteenth, T and U streets NW.....	1	3 by 3
In alley between Thirteenth and Fourteenth, S and T streets NW.....	1	3 by 3
In alley between First and Third, O and P streets NW.....	1	4 by 4
East side Water street, center M, SW.....	1	6 by 6
Northeast corner Twenty-third and Q streets NW.....	1	6 by 6
Northeast corner Eleventh and I streets NE.....	1	6 by 6
Center School street, south side Park NW.....	1	6 by 6
Center Sixteenth street, south side W, NW.....	1	12 by 6
Center Sixteenth and Erie streets NW.....	1	12 by 6
Center Sixteenth and Huron streets NW.....	1	12 by 6
Center Fifteenth street and Columbia road NW.....	1	12 by 6
West side Fourteenth street, center Columbia road NW.....	1	12 by 12
Center Fourteenth, Whitney, and Park streets NW.....	1	12 by 12
<i>Branches set at expense of applicants.</i>		
East side Eighth street, center D, SE.....	1	12 by 6
East side Eighth street, center E, SE.....	2	12 by 6
Total.....	20	

Y-branches connected to water main.

Location.	No.	Size.
		<i>Inches.</i>
Center Florida and Champlain avenues NW	1	6
Southeast corner Eighth and E streets NE	1	6
Northeast corner Eighth and E streets NE	1	6
Southwest corner Fifth and E streets NE	1	6
Northwest corner Fifth and E streets NE	1	6
Southwest corner Sixth and F streets NE	1	6
Northeast corner Sixth and D streets NE	1	6
Southeast corner Sixth and D streets NE	1	6
Southwest corner New Hampshire avenue and W street NW	1	6
Northwest corner Tenth street and Maryland avenue NE	1	6
Northeast corner Tenth street and Maryland avenue NE	1	6
Southwest corner Twelfth and C streets NE	1	6
Northwest corner Twelfth and C streets NE	1	6
Northwest corner Twenty-sixth and D streets NW	1	6
Northeast corner Twenty-sixth and D streets NW	1	6
Northwest corner Twenty-sixth and E streets NW	1	6
Northeast corner Twenty-sixth and E streets NW	1	6
Southeast corner Twenty-sixth and E streets NW	1	6
Southwest corner Twenty-sixth and E streets, NW	1	6
Northeast corner Eleventh and I streets NE	1	6
Southeast corner Eleventh and I streets NE	1	6
Southwest corner Eleventh and I streets NE	1	6
Northwest corner Eighteenth and D streets NW	1	6
Northeast corner Eighteenth and D streets NW	1	6
Southwest corner Eighteenth and D streets NW	1	6
Southeast corner Eighteenth and D streets NW	1	6
Southwest corner Eighteenth and E streets NW	1	6
Total	27	

Tees connected to water mains.

In alley between Seventh and Eighth, B and C streets NE	1	3 by 3
Center Harewood and Elm streets NW	1	3 by 3
In alley between Twenty-fourth and Twenty-fifth, and I and K streets NW	2	3 by 3
In alley between First and Second, and B and C streets NE	1	3 by 3
In alley between First and North Capitol, Pierce and L streets NW	1	3 by 3
In alley between Nineteenth and Twentieth, L and M streets NW	2	3 by 3
In alley between Fourteenth and Fifteenth, T and U streets NW	1	3 by 3
In alley between Twentieth and Twenty-first, K and L streets NW	1	3 by 3
In alley between Thirteenth and Fourteenth, S and T streets NW	1	3 by 3
In alley between New Jersey avenue and First street, and B and C streets SE	2	3 by 3
In alley between Twenty-first and Twenty-second, H and I streets NW	1	3 by 3
In alley between Twenty-first and Twenty-second, G and H streets NW	1	3 by 3
In alley between Third and Four-and-a-half, C and D streets SW	1	3 by 3
In alley between North Capitol and First, O and P streets NW	1	3 by 3
In alley between Ninth and Tenth, G and I streets SE	1	3 by 3
In alley between Twenty-first and Twenty-second, L and K streets NW	1	3 by 3
In alley between Twenty and Twenty-first, L and M streets NW	2	3 by 3
In alley between Sixth and Seventh, East Capitol and A streets SE	1	3 by 4
Center C street, between New Jersey avenue and First street SE	1	3 by 4
Center Third street, between K and L NE	1	3 by 6
West side Nineteenth street, between L and M NW	1	3 by 6
Center alley north side I street, between Third and Four-and-a-half SW	1	3 by 6
Center T street, between Fourteenth and Fifteenth NW	1	3 by 6
Center C street, between Delaware avenue and First street NE	1	3 by 6
East side Fifteenth street, between Rhode Island avenue and P street NW	1	3 by 6
Center T street, between Thirteenth and Fourteenth NW	1	3 by 6
Center B street, between New Jersey avenue and First street SE	1	3 by 6
Center H street, between Twenty-first and Twenty-second NW	1	3 by 6
Center H street, between Twenty-first and Twenty-second NW	1	3 by 6
Center Second street, between K and L NE	1	3 by 6
Center C street, between Third and Four-and-a-half SW	1	3 by 6
Center P street, between North Capitol and First NW	1	3 by 6
Center Ninth street, between G and I SE	1	3 by 6
West side Twenty-first street, between L and M NW	1	3 by 6
North side A street, between Sixth and Seventh SE	1	3 by 6
North side D street, between Seventeenth and Eighteenth, center alley NW	1	4 by 3
West side Sixteenth street, between L and M NW	1	4 by 4
South side O street, between Four-and-a-half and Sixth SW	1	4 by 4
West side Ninth street, center Westminster NW	1	4 by 4
North side Canal street, center Twenty-ninth NW	1	4 by 6
Center Trumbull street, between Sixth and Seventh NW	1	4 by 6
Center Union street, between N and OSW	1	4 by 6
Northeast corner Third and K street NW	1	4 by 6
Southeast corner Third and K streets NW	1	4 by 6
Center D street, west side New Jersey avenue NW	1	4 by 6

Tees connected to water mains—Continued.

Location.	No.	Size.
		<i>Inches.</i>
Center Third street, south side Massachusetts avenue NW	1	4 by 6
Center Thirty-first street, between Q and road NW	1	4 by 6
Center Thirty-third street, north side Canal NW	1	4 by 6
Center Westminster street, between Ninth and Tenth NW	1	4 by 6
Center Maple street, west side Harewood NW	1	4 by 6
North side K street, between Fourth and Fifth NW	1	4 by 6
Center Seventh street, between B and C NE	1	6 by 3
Center Sixth street, between A and B SE	1	6 by 3
Center Pierce street, between North Capitol and First NW	1	6 by 3
West side Tenth street, center Westminster NW	1	6 by 4
Northwest corner Twenty-first and O streets NW	1	6 by 6
Southwest corner Twenty-first and O streets NW	1	6 by 6
Center Twenty-first street, north side N NW	1	6 by 6
Center N street, west side Twenty-first NW	1	6 by 6
Center N street, east side Twenty-second NW	1	6 by 6
East side Eighth street, center E NE	1	6 by 6
Center E street, west side Fifth NE	1	6 by 6
Southeast corner Fourth and E streets NE	1	6 by 6
Center Seaton street, east side Florida avenue NW	1	6 by 6
Center K street, east side Delaware SW	1	6 by 6
South side C street, center Fifth SE	1	6 by 6
North side D street, center Fifth SE	1	6 by 6
Northwest corner Rhode Island avenue and Iowa Circle NW	1	6 by 6
Northwest corner Sixth and M streets SW	2	6 by 6
Southwest corner Sixth and M streets SW	1	6 by 6
North side M street, center Robinson SW	1	6 by 6
South side L street, center Robinson SW	2	6 by 6
West side Sixth street, center L SW	1	6 by 6
East side Seventh street, center L SW	1	6 by 6
North side E street, center Sixth NE	1	6 by 6
East side Sixth street, center Acker NE	1	6 by 6
Center I street, west side Third SW	1	6 by 6
North side Maryland avenue, center Seventh street NE	1	6 by 6
Center W street, west side New Hampshire avenue NW	1	6 by 6
Southeast corner Sixteenth and W streets NW	1	6 by 6
North side F street, center Eighth SW	1	6 by 6
South side F street, center Eighth SW	1	6 by 6
North side Florida avenue, center Thirteenth street NE	1	6 by 6
South side F street, center Tenth NE	1	6 by 6
Northeast corner Maryland avenue and Tenth street NE	1	6 by 6
South side Dupont Circle, east side Connecticut avenue NW	1	6 by 6
Center Fifth street, north side L NW	1	6 by 6
Center Sixth street, north side L NW	1	6 by 6
East side First street, center California avenue NE	1	6 by 6
West side Second street, center California avenue NE	1	6 by 6
Northwest corner Second and E streets NE	1	6 by 6
Northeast corner Massachusetts avenue and First street NE	1	6 by 6
Massachusetts avenue, between First and E streets NE	1	6 by 6
North side B street, center Ninth SE	1	6 by 6
Northwest corner Ninth and B streets SE	1	6 by 6
Northeast corner Ninth and B streets SE	1	6 by 6
Southeast corner North Carolina avenue and Ninth street SE	1	6 by 6
Southwest corner North Carolina avenue and Ninth street SE	2	6 by 6
East side Four-and-a-half street, center I SW	1	6 by 6
East side Third street, center D SW	1	6 by 6
West side Second street, center D SW	1	6 by 6
Southwest corner Fifteenth and G streets NE	1	6 by 6
East side Sixth street, center G NE	1	6 by 6
West side Seventh street, center G NE	1	6 by 6
North side W street, center Tenth NW	1	6 by 6
South side Florida avenue, center Tenth street NW	1	6 by 6
Center Eleventh street, south side Massachusetts avenue NE	1	6 by 6
Center Tenth street, south side Massachusetts avenue NE	1	6 by 6
East side Eleventh street, center C NE	1	6 by 6
Northwest corner Twelfth and C streets NE	1	6 by 6
North side Water street, center Twenty-ninth NW	1	6 by 6
Southwest corner New Hampshire avenue and H street NW	1	6 by 6
Northwest corner Twenty-sixth and E streets NW	1	6 by 6
Northeast corner Twenty-sixth and D streets NW	1	6 by 6
Center G street, east side New Hampshire avenue NW	1	6 by 6
Midway Eighth street, between Florida avenue and Grant NW	1	6 by 6
South side Grant avenue, center Eighth NW	1	6 by 6
Center Grant, west side Ninth street NW	1	6 by 6
West side Sixteenth street, center Riggs NW	1	6 by 6
Center Seventh street, between E and F NE	1	6 by 6
East side Sixth street, between E and F NE	1	6 by 6
Center Acker street, between Sixth and Seventh NE	1	6 by 6
North side I street, center Eighth NE	1	6 by 6
South side K street, center Eighth NE	1	6 by 6
Southeast corner Eighth and K streets NE	1	6 by 6
Center Sixth street, north side K SE	1	6 by 6

Tees connected to water mains—Continued.

Location.	No.	Size.
		<i>Inches.</i>
Center Sixth street, north side building line, SE.....	1	6 by 6
End Trumbull street, east end Linden NW.....	1	6 by 6
West side Eleventh street, center South Carolina avenue SE.....	1	6 by 6
East side Tenth street, center South Carolina avenue SE.....	1	6 by 6
Southwest corner Grant avenue and Seventh street NW.....	1	6 by 6
East side Seventh street, center Trumbull NW.....	1	6 by 6
East side Seventh street, south building line Grant avenue NW.....	1	6 by 6
Center Park and School streets NW.....	1	6 by 6
Center Park street, between Sixteenth and School NW.....	1	6 by 6
East side Sixteenth street, center Park NW.....	1	6 by 6
West side Seventh street, center F NE.....	1	6 by 6
Southeast corner Sixth and F streets NE.....	1	6 by 6
East side Fourteenth street, center Kennesaw NW.....	1	6 by 6
East side Fourteenth street, center Kenyon NW.....	1	6 by 6
Northeast corner Twenty-third and Q streets NW.....	1	6 by 6
Southwest corner Twenty-second street and Massachusetts avenue NW.....	1	6 by 6
South side N street, center Twelfth NE.....	1	6 by 6
North side H street, center Eleventh NE.....	1	6 by 6
North side H street, center Twelfth NE.....	1	6 by 6
South side I street, center Twelfth NE.....	1	6 by 6
West side Twelfth street, center I NE.....	1	6 by 6
East side Twelfth street, center Wylie NE.....	1	6 by 6
Southeast corner Maryland avenue and Ninth street NE.....	1	6 by 6
Southwest corner Maryland avenue and Ninth street NE.....	1	6 by 6
Center Valley street, between Q and Road, NW.....	1	6 by 6
Northeast corner Eighteenth and D streets NW.....	1	6 by 6
West side Seventeenth street, center D, NW.....	1	6 by 6
North side Water street, between Tenth and G, SW.....	1	6 by 6
Northeast corner Eleventh and Water streets SW.....	1	6 by 6
South side E street, center Ninth, SW.....	1	6 by 6
North side F street, center Ninth, SW.....	1	6 by 6
North side C street, center Ninth, NE.....	1	6 by 6
North side D street, center Ninth, NE.....	1	6 by 6
South side D street, center Ninth, NE.....	1	6 by 6
Center Ninth street, north side Maryland avenue NE.....	1	6 by 6
North side Eighteenth street, center Corcoran, NW.....	1	6 by 6
South side B street, center Ninth, NE.....	1	6 by 6
South side F street, center Ninth, NE.....	1	6 by 6
Center New York avenue and N street, NW.....	1	6 by 6
Center New York avenue and west side North Capitol street.....	1	6 by 6
West side Fourth street, between N and O, NW.....	1	6 by 6
East side Fourth street, between N and O, NW.....	1	6 by 6
Center Third street, south side G, NE.....	1	6 by 6
Center Third street, north side F, NE.....	1	6 by 6
Northeast corner Fourteenth and B streets, SW.....	1	6 by 6
East side Nineteenth street, southeast corner, NW.....	1	6 by 6
West side Third street, center R, NW.....	2	6 by 6
Center Thirty-second street, north side N, NW.....	1	6 by 6
East side Seventh street, center E, NW.....	1	6 by 6
Center California avenue, west side Eighteenth, NW.....	1	6 by 6
South side Columbia road, center Eighteenth, NW.....	1	6 by 6
Center Belmont street, west side Eighteenth, NW.....	1	6 by 6
East side Fourteenth street, center Princeton, NW.....	1	6 by 6
East side Twelfth street, center M, NE.....	1	6 by 6
Boundary, between Seaton and Champlain, NW.....	1	6 by 6
Northeast corner Twenty-second and O streets NW.....	1	6 by 6
Northeast corner Twenty-second and N streets NW.....	1	6 by 6
Northwest corner Ninth and E streets NE.....	1	6 by 6
North side O street, between First and Third, NW.....	1	6 by 6
Center Elliott street, south side Maryland avenue, NE.....	1	6 by 6
Center Franklin street, between New Jersey avenue and Fifth street, NW.....	1	6 by 6
Southeast corner Delaware avenue and I street SW.....	1	6 by 6
Northwest corner Fifth and D streets SE.....	1	6 by 6
East side Linden street, center Elm, NW.....	1	6 by 6
Center Larch street, east side Maple, NW.....	1	6 by 6
East side Twenty-second street, center Ward, NW.....	1	6 by 6
Northwest corner Third and I streets SW.....	1	6 by 6
Northeast corner Sixth and D streets NE.....	1	6 by 6
Southeast corner Sixteenth and N streets NW.....	1	6 by 6
Center New York avenue, between Sixth and Seventh streets, NW.....	1	6 by 6
Northwest corner Eighth and F streets SW.....	1	6 by 6
Northeast corner California avenue and First street NE.....	1	6 by 6
Northwest corner Second and D streets SW.....	1	6 by 6
Northeast corner Fifteenth and E streets NE.....	1	6 by 6
Northwest corner Tennessee avenue and F street NE.....	1	6 by 6
Northeast corner Sixth and G streets NE.....	1	6 by 6
Southwest corner Florida avenue and Tenth street NW.....	1	6 by 6
Northwest corner Massachusetts avenue and Eleventh street NE.....	1	6 by 6
Center Second street, between E and F, NW.....	1	6 by 6
Center Sixth street, between M and N, NW.....	1	6 by 6

Tees connected to water mains—Continued.

Location.	No.	Size.
		<i>Inches.</i>
Center E street, between Twelfth and Thirteenth, NW	1	6 by 6
Center O street, between Sixth and Seventh, NW	1	6 by 6
Center O street, between Ninth and Tenth, NW	1	6 by 6
East side Sixteenth street, center Erie street, NW	1	6 by 6
East side Sixteenth street, center Huron, NW	1	6 by 6
North side Columbia and Sixteenth streets NW	1	6 by 6
North side Columbia street, center Fifteenth, NW	1	6 by 6
Southwest corner Fourteenth and Columbia streets NW	1	6 by 6
West side Fourteenth street, center Kennesaw, NW	1	6 by 6
South side Fourteenth street, center Park, NW	1	6 by 6
South side Pennsylvania avenue, between Twenty-first and Twenty-second streets, NW	1	6 by 6
South side Pennsylvania avenue, between Seventeenth and Eighteenth streets, NW	1	6 by 6
Center M street, east side Twelfth, NE	1	6 by 6
Southeast corner Twenty-sixth and F Streets NW	1	6 by 6
Center F street, east side Twenty-sixth, NW	1	6 by 6
East side Seventh street, center E, NW	1	6 by 6
Center Florida avenue, between New Jersey avenue and Fifth street, NW	1	6 by 12
Center Twenty-second street and Ward Place NW	1	6 by 12
Center Sixteenth and Superior streets NW	2	6 by 12
At Alley Columbia road, between Fourteenth and Fifteenth streets, NW	1	6 by 12
Center Columbia road and alley NW	1	6 by 12
West side Fourteenth street, center Kenesaw, NW	1	6 by 12
East side Fourteenth street, center Whitney, NW	1	6 by 12
Center Fourteenth street, between Park and Whitney, NW	1	6 by 12
South side Florida avenue, center Eighteenth street, NW	1	6 by 12
Center Four-and-a-half street, between M and N, SW	1	6 by 12
South side Morris street, Center Sixteenth, NW	1	12 by 12
East side Sixteenth street, center Morris, NW	1	12 by 12
Center Sixteenth and Columbia streets, NW	2	12 by 12
Center B street, east side Fifteenth street, SE	1	6 by 6
<i>Tees set at expense of applicants.</i>		
Center Fifth street, between H and I, NW	1	6 by 2
Center Fourteenth street, between B and C, SW	1	6 by 3
Center H street, between Thirteenth and Fourteenth, NW	1	6 by 3
Center Twenty-third street, between I and K, NW	1	6 by 3
Center G street, between Seventeenth and Eighteenth, NW	1	6 by 3
Center H street, between Fifteenth and Fifteenth-and-a-half, NW	1	6 by 3
Center Thirteenth street, between G and H, NW	1	6 by 3
Center H street, between Seventeenth and Eighteenth, NW	1	6 by 3
Center G street, between Thirteenth and Fourteenth, NW	1	6 by 3
Center Twenty-fourth street, between L and M, NW	1	6 by 4
Center D street, west side New Jersey avenue, NW	1	6 by 4
West side Thirteenth street, south side M, NW	1	6 by 6
Center Twenty-second street, south side M, NW	1	6 by 6
North side Pennsylvania avenue, center Twenty-sixth street, NW	1	6 by 6
Center Twenty-sixth street and Pennsylvania avenue NW	1	6 by 6
Center North Capitol street, between C and D	1	6 by 6
Center Pennsylvania avenue and Eighth street SE	1	12 by 12
Center Twenty-fourth street, south side Pennsylvania avenue, SE	1	12 by 6
East side Twenty-eighth street, center M, NW	1	4 by 4
Total	265	

Reducers connected to water mains.

Center Harewood and Elm streets NW	1	6 to 3
East side Connecticut avenue, between Dupont circle and M, NW	1	6 to 3
Center Union street, between N and O, SW	1	6 to 3
North side O street, between First and Third, NW	1	6 to 4
Center Elliott street, south side Maryland avenue, NE	1	6 to 4
Center Union and O streets SW	2	6 to 4
Center Union and N streets SW	1	6 to 4
Southwest corner Ninth and T streets NW	1	6 to 4
South side Canal street, center Twenty-ninth, NW	1	6 to 4
Southwest corner Sixteenth and S streets NW	1	6 to 4
Northwest corner Sixteenth and R streets NW	1	6 to 4
Northeast corner Sixteenth and R streets NW	1	6 to 4
Southeast corner Sixteenth and S streets NW	1	6 to 4
Southwest corner New Jersey avenue and K street NW	1	6 to 4
Center Sixteenth street and Columbia road NW	1	12 to 6
West side Fourteenth street, center Columbia road, NW	2	12 to 6
Center Fourteenth, Whitney, and Park streets NW	1	12 to 6
Center Ward place, east side Twenty-second street, NW	1	6 to 4

Reducers connected to water mains—Continued.

Location.	No.	Size.
<i>Reducers set at expense of applicants.</i>		
Center M street, east side Twenty-eighth, NW	2	Inches. 6 to 4
Center Twenty-fifth street, south side Pennsylvania avenue, NW	2	6 to 4
Center Twenty-sixth street and Pennsylvania avenue NW	1	6 to 4
Total	25	

Bends connected to water mains.

East side Connecticut avenue, between Dupont Circle and N street, NW	1	3
In alley between K and L, Twenty and Twenty-first streets, NW	1	3
Center Ward, between New Hampshire avenue and Twenty-second street, NW	1	4
Southwest corner New Jersey avenue and K street NW	1	4
West side D street and New Jersey avenue NW	2	4
Center Spruce and Linden streets NW	2	4
Southeast corner Twenty-second and O streets NW	1	6
Northeast corner Twenty-second and O streets NW	1	6
Southwest corner Twenty-first and O streets NW	1	6
Northwest corner Twenty-first and N streets NW	2	6
Southwest corner Twenty-first and N streets NW	1	6
Southeast corner Twenty-second and N streets NW	1	6
Northeast corner Twenty-second and N streets NW	1	6
In yard Bureau of Printing and Engraving, SW	1 1/2	6
Northeast corner Fourteenth and B streets SW	1 1/2	6
Southeast corner Thirteenth and U streets NW	1	6
Northwest corner Fifth and D streets SE	1	6
Southwest corner Fifth and C streets SE	1	6
Center Florida avenue, between New Jersey avenue and Fifth street, NW	1	6
Northeast corner Rhode Island avenue and Fourteenth street NW	1	6
Southeast corner Water and M streets SW	1	6
Northeast corner Water and M streets SW	1	6
Southwest corner Sixth and L streets SW	1	6
Northwest corner Sixth and L streets SW	1	6
Southeast corner Seventh and L streets SW	1	6
Northeast corner Seventh and L streets SW	1	6
Northwest corner Sixth and E streets NE	1	6
Northeast corner Sixth and E streets NE	1	6
Center Twenty-second and Ward streets NW	1	6
Northwest corner Third and I streets SW	1	6
North side Maryland avenue at D street NE	2	6
North side Maryland avenue, between Seventh and D streets, NE	1	6
Center W, west side New Hampshire avenue NW	1	6
Northwest corner Eighth and F streets SW	1	6
Southwest corner Eighth and E streets SW	1	6
Northeast corner Eighth and F streets SW	1	6
Southeast corner Eighth and E streets SW	1	6
North side Florida avenue, center Thirteenth street, NE	1	6
Southwest corner Tenth and F streets NE	1	6
Southeast corner Tenth and F streets NE	1	6
East side Connecticut avenue, between Dupont Circle and N street, NW	1	6
Northeast corner Four-and-a-half and I streets SW	1	6
Northwest corner Second and D streets SW	1	6
Southwest corner Second and D streets SW	1	6
Southeast corner Third and D streets SW	1	6
Northeast corner Third and D streets SW	1	6
Center New Jersey avenue and E street SE	1	6
West side Fifteenth street and Tennessee avenue NE	1	6
Southwest corner Seventh and G streets NE	1	6
Southeast corner Sixth and G streets NE	1	6
Northeast corner Sixth and G streets NE	1	6
Northwest corner Seventh and G streets NE	1	6
Southwest corner Tenth street and Florida avenue NW	1	6
Southeast corner Tenth street and Florida avenue NW	1	6
Northeast corner Tenth and W streets NW	1	6
Northwest corner Tenth and W streets NW	1	6
Northwest corner Eleventh street and Massachusetts avenue NE	1 1/2	6
Northeast corner Tenth street and Massachusetts avenue NE	1 1/2	6
Southeast corner Tenth street and Massachusetts avenue NE	1 1/2	6
Southwest corner Eleventh street and Massachusetts avenue NE	1 1/2	6
Northeast corner Third and C streets SW	1	6
Southeast corner Third and B streets SW	1	6
Northeast corner Eleventh and C streets NE	1	6
Southeast corner Eleventh and C streets SE	1	6
Northwest corner New Hampshire avenue and F street NW	1	6
East side New Hampshire avenue near Twenty-sixth street NW	1	6
Center Florida and Grant avenues NW	1	6

Bends connected to water mains—Continued.

Location.	No.	Size.
		Inches.
Northwest corner Sixteenth and R streets NW	1	6
Northeast corner Sixteenth and R streets NW	1	6
Southwest corner Sixteenth and S streets NW	1	6
Southeast corner Sixteenth and S streets NW	1	6
Northwest corner Eighth and I streets NE	1	6
Northeast corner Eighth and I streets NE	1	6
Southwest corner Eighth and K streets NE	1	6
Southeast corner Eighth and K streets NE	1	6
Northwest corner Eleventh street and South Carolina avenue SE	1	6
Southwest corner Eleventh street and South Carolina avenue SE	1	6
Southeast corner Tenth street and South Carolina avenue SE	1	6
Northeast corner Tenth street and South Carolina avenue SE	1	6
West side Seventh street, center Pomeroy NW	1	6
East side Seventh street, south building line Grant avenue NW	1	6
Southwest corner Seventh and F streets NE	1	6
Northwest corner Ninth and E streets NE	1	6
Northeast corner Ninth street and Maryland avenue NE	1	6
Southwest corner Ninth and F streets NE	1	6
Southeast corner Ninth and F streets NE	1	6
Center Fifteenth and Columbia streets NW	1	6
Corner Fourteenth and Whitney streets NW	1	6
Southeast corner Fifth and C streets SE	1	6
Northeast corner Fifth and D streets SE	1	6
Center Seventh and G Streets NE	2	6
Center Eighteenth street and California avenue NW	1	6
Thirteenth street, near curb line, north side E NW	1	6
Southeast corner Twenty-third street and Massachusetts avenue NW	1	6
Northwest corner Twenty-second and Q streets NW	1	6
Northwest corner Twelfth and H streets NE	1	6
Northeast corner Twelfth and H streets NE	1	6
Southwest corner Twelfth and I streets NE	1	6
Southeast corner Twelfth and I streets NE	1	6
Northwest corner Ninth and D streets NE	1	6
Northeast corner Ninth and D streets NE	1	6
Northwest corner Seventeenth and D streets NW	1	6
Southwest corner Seventeenth and D streets NW	1	6
Near northeast corner Eleventh and Water streets SW	1	6
Northwest corner Ninth and F streets SW	1	6
Southwest corner Ninth and E streets SW	1	6
Center Ninth and E streets SW	1	6
Southeast corner Ninth and E streets SW	1	6
Northeast corner Ninth and F streets SW	1	6
East side Fourteenth, near northeast corner Fourteenth and B streets SW	1	6
Florida avenue and Eighteenth street NW	1	6
Center Sixteenth street and Columbia avenue	1	12
Southeast corner Sixteenth and Morris streets NW	1	12
<i>Bends set at expense of applicants.</i>		
Center M street, east side Twenty-eighth NW	2	4
Center Pennsylvania avenue and Twenty-sixth street NW	2	4
Center Twenty-sixth street and Pennsylvania avenue NW	1	6
Southeast corner Twenty-eighth and M streets NW	1	6
Northeast corner Twenty-eighth and M streets NW	1	6
East side Eighth street, center D SE	4	6
East side Eighth street, center E SE	2	6
West side Eighth street, center E SE	4	6
South side Pennsylvania avenue, center Twenty-fourth street NW	1	6
Center Twenty-fifth street, south side Pennsylvania avenue NW	1	6
South side Pennsylvania avenue, intersection of L street NW	1	6
Center Twenty-second street, south side Pennsylvania avenue NW	1	6
Center Twenty-first street and Pennsylvania avenue NW	1	6
Center Pennsylvania avenue and Eighth street NW	1	12
East side Eighth street, center G SE	2	6
West side Eighth street, center G SE	2	6
Total	142	

STOP VALVES.

One hundred and five stop-valve casings have been adjusted to the new grade. One hundred and thirty-two repairs have been made to stop valves.

Stop valves connected to water mains and inclosed with cast-iron casings and covers.

Location.	No.	Size.	Way.
		In.	
East side Seventh street between B and C NE	1	3	2
East side Connecticut avenue between Dupont Circle and N street NW	1	3	2
West side Nineteenth street between L and M, NW	1	3	2
West side I street between Third and Four-and-a-half, SW	1	3	2
North side T street between Fourteenth and Fifteenth, NW	1	3	2
South side C street between Delaware avenue and First street NE	1	3	2
East side Fifteenth street between Rhode Island avenue and P street NW	1	3	2
South side T street between Thirteenth and Fourteenth NW	1	3	2
South side B street between New Jersey avenue and First street SE	1	3	2
North side C street between New Jersey avenue and First street SE	1	3	2
North side H street between Twenty-first and Twenty-second, NW	1	3	2
Center H street between Twenty-first and Twenty-second, NW	1	3	2
East side Second street between K and L, NE	1	3	2
West side Third street between K and L, NE	1	3	2
Center P street between North Capitol and First, NW	1	3	2
East side Ninth street between G and I, SE	1	3	2
West side Twenty-first between L and M, NW	1	3	2
North side A street between Sixth and Seventh, SE	1	3	2
North side D street between Seventeenth and Eighteenth, NW	1	3	2
Southwest corner Ninth and T streets NW	1	4	2
West side Tenth street, center Westminster, NW	1	4	2
Center Thirteenth and W streets NW	1	4	2
Center Seaton street, east side Florida avenue NW	1	6	2
Center N street, east side Twenty-second, NW	1	6	2
Southwest corner Twenty-first and O streets NW	1	6	2
Bureau Engraving and Printing yard near boiler room, SW	1	6	2
Bureau Engraving and Printing yard east of boiler room, SW	1	6	2
Center Larch, north side of Florida avenue NW	1	6	2
Northwest corner Rhode Island avenue and Iowa Circle NW	1	6	2
South side L street, center Robinson, SW	1	6	2
East side Water street, center M, SW	1	6	2
Northwest corner Sixth and M streets SW	1	6	2
East side Seventh street, corner L, SW	1	6	2
Center Twenty-second and Ward streets NW	1	6	2
Center Seventh street, north side Maryland avenue NE	1	6	2
Southwest corner New Hampshire avenue and W street NW	1	6	2
Center Sixteenth street, south side W, NW	2	6	2
North side Maryland avenue, center Tenth street NE	1	6	2
Southeast corner Dupont Circle and Connecticut avenue NW	1	6	2
Northwest corner Fifth and L streets, NW	1	6	2
Northeast corner Sixth and L streets NW	1	6	2
Southeast corner Twenty-sixth and F streets NW	1	6	2
Center G street, east side New Hampshire avenue NW	1	6	2
Center Eighth street between Florida avenue and Grant street NW	1	6	2
West side Sixteenth street, Center Riggs, NW	1	6	2
East side Sixth street between E and F, NE	1	6	2
Center Pine and Park streets NW	1	6	2
Center Park street between Sixteenth and Pine, NW	1	6	2
South side Morris street center Sixteenth, NW	1	6	2
East side Sixteenth street center Morris, NW	1	6	2
Center Sixteenth and Superior streets NW	2	6	2
Center Sixteenth and Huron streets NW	2	6	2
Center Sixteenth and Columbia streets NW	2	6	2
Center Fifteenth and Columbia streets NW	2	6	2
In alley on Columbia street between Fourteenth and Fifteenth, NW	1	6	2
Center Columbia street and alley, NW	1	6	2
West side Fourteenth street center Columbia, NW	2	6	2
West side Fourteenth street center Kennesaw, NW	1	6	2
Center Fourteenth street between Whitney and Park, NW	4	6	2
East side Fourteenth street center Kennesaw, NW	1	6	2
East side Fourteenth street center Kenyon, NW	1	6	2
Southeast corner Twenty-third street and Massachusetts avenue NW	1	6	2
Southwest corner Twenty-second street and Massachusetts avenue NW	1	6	2
East side Twelfth street, center Wylie, NE	1	6	2
Center Valley street, between Road and Q, NW	1	6	2
Near center Four-and-a-half street, between M and N, SW	1	6	2
Northeast corner Fourteenth and B streets SW	1	6	2
Center Thirty-second street, north side N, NW	1	6	2
Center Thirteenth and W streets NW	1	6	2
Center Sixteenth and Erie streets NW	1	6	4
Center Ninth street, north side E, NE	1	6	4
Center Union street, north side O, SW	1	6	4
Center Sixth and F streets NE	1	6	4

Stop valves connected to water mains, etc—Continued.

Location.	No.	Size.	Way.
		In.	
Center Sixth and D streets NE.....	1	6	4
Center Thirteenth street, south side Florida avenue NE.....	1	6	4
Center First street, north side North Carolina avenue SE.....	1	6	4
Center Seventh and G streets NE.....	1	6	4
Center Sixth and G streets NE.....	1	6	4
Center Eleventh street, north side Massachusetts avenue NE.....	1	6	4
Center Twelfth and C streets NE.....	1	6	4
Center Twenty-sixth and E streets NW.....	1	6	4
Center Twenty-sixth and D streets NW.....	1	6	4
Center Tenth street and Florida avenue NW.....	1	6	4
Center Eighth and K streets NE.....	1	6	4
East side Linden street, center Pomeroy, NW.....	1	6	4
East side Linden street, center Trumbull, NW.....	1	6	4
Center Sixteenth and Park streets NW.....	1	6	4
East side Fourteenth street, center Columbia, NW.....	1	6	4
Center Twelfth and N, extended, NE.....	1	6	4
Center Eleventh and I streets NE.....	1	6	4
Center Valley and Q streets NW.....	1	6	4
Center Ninth and D streets NE.....	1	6	4
Center First street and R, extended, NW.....	1	6	4
Center North Capitol street and R, extended, NE.....	1	6	4
Southwest corner Nineteenth and R streets NW.....	1	6	4
Center Eighteenth and Vernon streets NW.....	1	6	4
Center Eighteenth street and California avenue NW.....	1	6	4
Center Eighteenth street and Florida avenue NW.....	1	6	4
Center Seventeenth street, south side V, NW.....	1	6	5
Center Eighteenth and D streets NW.....	1	6	5
Center Eighteenth and E streets NW.....	1	6	5
Center Park and School streets NW.....	1	6	3
North side Water street, center G, SW.....	1	6	3
Center Columbia street, between Fifteenth and Sixteenth, NW.....	1	12	2
Center Fourteenth street, between Park, Kennesaw, and Whitney, NW.....	1	12	2

Stop valves set at expense of applicants.

Center Fourteenth street, between B and C, SW.....	1	3	2
Northwest corner New Jersey avenue and D street NW.....	1	3	2
Center H street, between Thirteenth and Fourteenth, NW.....	1	3	2
Center Twenty-third street, between I and K, NW.....	1	3	2
Center H street, between Fifteenth and Fifteen-and-a-half, NW.....	1	3	2
Center H street, between Seventeenth and Eighteenth, NW.....	1	3	2
Center G street, between Thirteenth and Fourteenth, NW.....	1	3	2
Center Twenty-fourth, between L and M, NW.....	1	4	2
Southwest corner New Jersey avenue and D street NW.....	1	4	2
Nearly in center Twenty-eighth and M streets NW.....	1	4	2
Center Twenty-sixth street and Pennsylvania avenue NW.....	1	4	2
Center Fourteenth and B streets.....	1	6	2
Center North Capitol street, between C and D, NW.....	1	6	2
East side Eighth street, center E, SE.....	2	6	2
East side Eighth street, center D, SE.....	1	6	2
Southeast corner Thirty-second and M streets NW.....	1	6	2
Center Thirty-first street, south side M, NW.....	1	6	2
South side M street, west side Thirtieth, NW.....	1	6	2
Center Twenty-first street and Pennsylvania avenue NW.....	1	6	2
South side Pennsylvania avenue center Twenty-fourth street NW.....	1	6	2
Center Twenty-fifth street south side Pennsylvania avenue NW.....	1	6	4
Center Twenty-second street south side Pennsylvania avenue NW.....	1	6	4
Center Twenty-first street south side Pennsylvania avenue NW.....	1	6	4
West side Eighth street, center D, SE.....	1	6	4
West side Eighth street, center E, SE.....	2	6	4
Center Twenty-fourth street and Pennsylvania avenue NW.....	1	12	2
West side Fourteenth street center Florida avenue NW.....	1	6	2
Total.....	143		

Water mains lowered.

Location.	Size pipe.	Length main.
	Inches.	Lin. feet.
First street and New York avenue NW.....	6	53
Fifth and C street SE.....	6	25
B street, between Seventeenth and Nineteenth, SE.....	6	1, 216
Ninth street, between B and C, NE.....	6	108
Total.....		1, 402

Service pipes lowered.

Location.	Feet.
R street, between Seventeenth and Eighteenth, NW.....	70
Ninth street, between B and C, NE.....	80
Ninth and B streets SE.....	47
B street, between Tenth and Eleventh, SE.....	36
Total.....	233

Seven hundred and fifteen service boxes and street washers were adjusted to the new grade as follows:

Thirteenth street, between B and C SW	50
L street, between Sixteenth and Seventeenth NW.....	5
Tenth street, between I and K NW	5
Twenty-first street, between G and N NW	31
R street, between Seventeenth and Eighteenth NW	18
Twenty-fifth street, between Pennsylvania avenue and K NW.....	10
I street, between Twentieth and Twenty-third NW	56
K street, between Twentieth and Twenty-second NW	7
Twenty-third street, between I and K NW.....	28
Ninth street, between H and Maryland avenue NE.....	12
Tenth street, between East Capitol and D SE.....	61
New York avenue, between First and North Capitol NW	12
C street, between First and Third SE.....	4
P street, between North Capitol and Fourth NW.....	39
South Carolina avenue, between Ninth and Tenth SE	2
R street, between Second and Seventh NW.....	40
Corcoran street, between Eighteenth and Nineteenth NW.....	8
Florida avenue, between Fourth and Fifth NW.....	8
Fourth street, between M and Florida avenue NW	73
Maple avenue, Le Droit Park	5
Thirty-fourth street, between P and Q NW	7
Q street, between Thirty-fourth and Thirty-fifth NW	2
D street, between First and Seventh SW.....	27
Twelfth street, between V and W NW.....	14
I street, between Third and Eighth SE	15
Eighth street, between C and D SE.....	6
Eighth street, between C and Maryland avenue NE.....	4
Fifteenth street, between F and G NE.....	4
G street, between Eleventh and Twelfth SE	4
Thirty-fifth street, between V and W NW	4
G street, between Twelfth and Thirteenth NW.....	7
U street, between Ninth and Tenth NW	12
L street, between Fourteenth and Sixteenth SE.....	36
E street, between Ninth and Tenth NW.....	34
B street, between Fifteenth and Sixteenth SE	23
Eleventh street, between R and T NW.....	31
Four-and-a-half street, between C and D SW.....	4
Vermont avenue, between Seventeenth and Eighteenth NW	7
Total	715

STREET HYDRANTS.

Twelve hydrants have been erected in new locations; 34 have been erected in place of old ones; 7 have been removed and abandoned, and 682 repairs have been made to hydrants, and 8 have been removed to the new curb lines.

Erected in new locations.—Corner Tenth and V streets NW.; north alley First and Second, D and E streets NW.; Wiltberger street, between Sixth and Seventh, S and T, NW.; corner Twenty-second and P streets NW.; Four-and-a-half street, between O and P streets, SW.; Fourteen-and-a-half and C streets NE.; corner Twelfth and D streets NE.; Meridian avenue and Erie street NW.; alley First and Second, E and F streets NW.; Twenty-sixth street between E and F, NW.; Seventh and Trumbull streets NW.; Sixth and M streets NE.

Erected in place of old ones.—Union street, between M and N, SW.; corner Twenty-sixth and P streets NW.; corner Second and C streets NW.; Seventh street, between

B and C, SW.; corner Twelfth and H streets NW.; G street, between Second and Third, SW.; corner Fourth and K streets SE.; corner Twenty-third and H streets NW.; Thirteenth street, between E and F, NW.; corner Four-and-a-half and K streets SW.; corner Ninth and East Capitol streets; corner Thirty-third and Q streets NW.; corner Thirteen-and-a-half and C streets SW.; corner Third and R streets NW.; corner Third and N streets SW.; corner Second and L streets SE. P street, between Twenty-fourth and Twenty-fifth, NW.; corner Fifth and Q NW.; corner Thirteenth and H streets NW.; corner Thirteenth and F streets NW.; corner Twelfth and H streets NW.; Thirteenth street, between G and H, NW.; corner New York avenue and Thirteenth street NW.; corner Twenty-fourth and M streets NW.; corner Maryland avenue and Thirteen-and-a-half street SW.; corner Fourth and H streets NE.; corner Twenty-third and H streets NW.; corner Thirty-second and Grace streets NW.; D street, between Third and Fourth, SW.; corner Tenth and E streets SW.; corner Seventeenth and B streets SE.; corner Fifth and I streets SE.; corner Twenty-second and F streets NW.; corner Eleventh and N streets NW.

Removed and abandoned.—P street, between Fifteenth and Sixteenth, NW.; Sixteenth street, between K and L, NW.; I street, between Seventh and Eighth, SE.; Nineteenth street, between G and H, NW.; corner Thirty-fifth and Water streets NW.; corner North Capitol and C streets NE.; west side Sixth street, between L and M, NE.

Moved to new curb line.—Brightwood avenue; P street, between North Capitol and First, NW.; Seventh street, between L and M, SE.; corner Seventh and L streets SE.; corner Thirty-fourth and Q streets NW.; corner Fifth and C streets SE.; corner Eleventh and U streets NW.; Eleventh street, between U and V, NW.

FOUNTAINS.

Two new fountains, presented by the Humane Society, were erected by the water department in new locations. One hundred and thirty-three repairs were made to fountains.

Erected in new locations.—Fifteenth street and Columbia avenue NW.; First street and Indiana avenue NW.

FIRE HYDRANTS.

Seventy-two improved fire hydrants have been erected in new locations, 2 have been changed to new grade, 13 have been moved to the new curb line, 1 has been changed from one location to another, and 917 repairs have been made to fire hydrants.

Erected in new locations.—Northwest corner Twelfth and M street extended NE.; west side Thirty-first street, between Q and Road, NW.; northwest corner Thirty-third and Canal streets NW.; northeast corner Twenty-second and O streets NW.; northeast corner Florida avenue and Seaton streets NW.; northeast corner Twenty-second and N streets NW.; northwest corner Ninth and E streets NE.; northwest corner alley O, between First and Third streets, NW.; southwest corner Madison avenue and Elliott street NE.; south side Franklin, between New Jersey avenue and Fifth street, NW.; southeast corner Four-and-a-half and Van streets SW.; north side Westminster street, between Ninth and Tenth, SW.; southeast corner Delaware avenue and I street SW.; northwest corner Fifth and D streets SE.; northeast corner Linden and Elm streets NW.; southeast corner Maple and Larch NW.; southwest corner Robinson and L SW.; southeast corner Twenty-second and Ward Place NW.; northwest corner Third and I streets SW.; northeast corner Sixth and D streets NE.; southeast corner Sixteenth and W streets NW.; south side New York avenue, between Sixth and Seventh streets, NW.; northwest corner Eighth and F streets SW.; northeast corner Sixteenth and Erie streets NW.; northeast corner Maryland avenue and Tenth street NE.; northeast corner Sixteenth and Huron streets NW.; northwest corner Sixteenth and Columbia streets NW.; northwest corner Fifteenth and Columbia streets NW.; southwest corner Fourteenth and Columbia streets NW.; northwest corner Fourteenth and Kenesaw streets NW.; southwest corner Fourteenth and Park streets NW.; northeast corner First and California streets NE.; northwest corner Second and D streets SW.; northeast corner Fifteenth and E streets NE.; northwest corner Tennessee avenue and F street NE.; northeast corner Sixth and G streets NE.; southwest corner Florida avenue and Tenth street NW.; northwest corner Massachusetts avenue and Eleventh street, NE.; northwest corner Maple and Harewood streets NW.; northwest corner Twelfth and C streets NE.; northwest corner Twenty-ninth and K streets NW.; southwest corner New Hampshire avenue and Twenty-sixth street NW.; northwest corner Twenty-sixth and E streets NW.; northeast corner Twenty-sixth and D streets NW.; west side Eighth street, between Florida avenue and Grant street, NW.; southwest corner Eighth and Grant streets NW.; east side Second, between E and F streets, NW.; north side Grant and opposite Ninth street NW.; west side Sixth street, between M and N, NW.; north

side Acker street, between Sixth and Seventh, NE.; southeast corner Eighth and K streets NE.; north side E street, between Twelfth and Thirteenth, NW.; northwest corner Sixth and K streets SE.; east end Trumbull, east of Linden, NW.; southeast streets NW.; southwest corner School and Park streets NW.; northeast corner Sixteenth and Park streets NW.; north side Park street, between Sixteenth and Pine, NW.; north side K street, between Fourth and Fifth, NW.; southeast corner Sixth and F streets NE.; south side O street, between Sixth and Seventh, NW.; south side O street, between Ninth and Tenth streets, NW.; northeast corner Twenty-third and Q streets NW.; southwest corner Twelfth and N streets NE.; northeast corner Eleventh and I streets NE.; south side Pennsylvania avenue, between Twenty-first and Twenty-second streets, NW.; south side Pennsylvania avenue, between Seventeenth and Eighteenth streets, NW.; west side Valley street, between Q and Road, NW.; northwest corner Eighteenth and D streets NW.; north side Water street, between Tenth and G, SW.; northeast corner Fifteenth and B streets SE.

Changed to new grade.—North Carolina avenue, between Sixth and Seventh streets, SE.; corner Thirty-fourth and Q streets NW.

Moved to new curb line.—Corner Tenth and B streets SE.; corner Tenth and D streets SE.; corner Sixteenth and M streets NW.; corner Seventh and L streets SE.; corner Seventh and K streets SE.; corner Maple and Larch streets NW.; corner Eleventh and C streets SE.; corner Maryland avenue and Elliott street NE.; corner Tennessee avenue and F street NE.; corner Ninth and F streets NW.; corner B street, between Seventeenth and Eighteenth SE.; corner Second and L streets NE.; corner Thirty-fourth and Q streets NW.

Changed from one location to another.—From southwest corner First and K streets NE., and erected improved fire hydrant on the northwest corner First and K streets NE.

PUMPS.

Two new pumps have been erected in new locations. Thirty-one have been erected in place of old ones. Nine have been removed, wells filled, and abandoned. Two have been moved to the line of the new curb. Thirty-two wells have been cleaned. Three hundred and sixty-three repairs have been made to pumps.

Erected in new locations.—Louisiana avenue, between Ninth and Tenth streets NW.; Lincoln avenue, between S and T streets NE.

Erected in place of old ones.—D street, between Ninth and Tenth SW.; Twelfth street, between D and E, SE.; corner Third and L streets NW.; corner Ninth street and South Carolina avenue SE.; corner Third and C streets SE.; corner Second and E streets SE.; corner Ninth and A streets NE.; corner of Fourth street and South Carolina avenue SE.; O street between Thirty-first and Thirty-second NW.; corner New Jersey avenue and L street SE.; corner North Capitol and Randolph streets NW.; corner Fourth and E streets NE.; Eleventh street between F and G NW.; Thirty-fourth street, between P and Q, NW.; corner Thirteenth and F streets NE.; corner Thirty-fourth and S streets NW.; corner Thirty-fourth and Q streets NW.; corner First and K streets NE.; Sixth street, between M and N, SW.; Caton avenue NE.; Sixteenth street between A and B NE.; New Jersey avenue between M and N streets NW.; corner Second and B streets NW.; corner First and K streets SE.; Fourth street, between P and Q, NW.; corner Twelfth street and Florida avenue NW.; corner Fifteenth and M street NW.; corner Eighth and C streets NE.; Twelfth street and New York avenue NW.; Thirty-fourth street, above U, NW.; corner Third and D streets SW.

Pumps removed, wells filled, and abandoned.—Corner Second and C streets SE.; south side G street, between First and North Capitol, NW.; First street, between D and North Carolina avenue, SE.; corner Seventh and H streets NW.; Thirteenth street, between K and L, NW.; corner Ninth and East Capitol streets SE.; O street, between First and North Capitol, NE.; corner Twenty-first street and Pennsylvania avenue NW.; corner Third and R streets NW.

Moved to the new curb line.—Corner Thirty-fourth and Q streets NW.; corner Eighth and A streets, SE.

WELLS.

Wells cleaned.—Corner Third and C streets SE.; corner Third and L streets NW.; G street, between First and North Capitol, NW.; corner Ninth street and South Carolina avenue SE.; corner Second and E streets SE.; corner Fourth street and South Carolina avenue SE.; O street, between Thirty-first and Thirty-second, NW.; corner Eighth and C streets NE.; corner New Jersey avenue and L street SE.; corner North Capitol and Randolph streets; corner Fourth and E streets NE.; Eleventh street, between F and G, NW.; corner Thirty-fourth and S streets NW.; Thirty-fourth street, between P and Q, NW.; corner Thirty-fourth and Q streets NW.; corner Ninth and East Capitol streets SE.; corner Twelfth street and New York avenue NW.; Sixteenth street, between A and B, NE.; Caton avenue; Sixth

street, between M and N, SW.; corner Fifth and L streets NE.; O street between, First and North Capitol NE.; Thirty-fourth street, above U, NW.; New Jersey avenue between, M and N streets, NW.; corner Eighth and P streets NW.; corner Third and D streets SW.; corner First and K streets NE.; Fourth street, between P and Q, NW.; corner Twelfth street and Florida avenue NW.; Tenth street, between T and U, NW.; corner Eighth and P streets NW.; corner Thirty-second and T streets, NW.

TRAPS.

Brick traps and iron gratings set.—Corner Third and L streets NW.; N street, between First and New Jersey avenue, SE.; corner Sixth and K streets NW.; corner Third and C streets SE.; corner Ninth street and South Carolina avenue SE.; corner Ninth and A streets NE.; O street, between Thirty-first and Thirty-second, NW.; Virginia avenue between Tenth and Eleventh streets SW.; Louisiana avenue, between Ninth and Tenth, NW.; corner Eighth and C streets NE.; corner New Jersey avenue and L street SE.; corner Fourth and E streets NE.; Eleventh street, between F and G, NW.; corner Twelfth street and New York avenue NW.; corner Thirteenth and F streets NE.; corner Thirty-fourth and Q streets NW.; Sixth street, between M and N, SW.; corner N street and New Jersey avenue NW.; corner Second and B streets NW.; corner Third and D streets SW.; Fourth street, between P and Q, NW.; corner Eighth and P streets NW.; corner Twelfth street and Florida avenue NW.; corner Eighth and E streets SW.; corner Fifteenth and M streets NW.

REPORT OF THE CHIEF CLERK, WATER DEPARTMENT.

ENGINEER DEPARTMENT, WATER OFFICE,
Washington, D. C., October 30, 1891.

SIR: I have the honor to submit the following report of the operations of the water department and a statement of the receipts and expenditures for the fiscal year ending June 30, 1891:

Receipts	\$272,497.01
Expenditures	221,785.30

Also Table 1, a statement of assessments and collections of water-main tax from July 1, 1878 to June 30, 1891:

Total amount assessed	\$430,061.30
Total amount collected	347,353.58

Table 2, a statement of the receipts of the Water Department from all sources from July 1, 1878 to June 30, 1891, amounting to \$2,270,010.04;

Table 3, a statement of expenditures from 1879 to 1891, showing total expenditures of \$1,157,284.67;

Table 4, a statement of advances to the Treasury of the United States from 1880 to 1891, amounting to \$935,350.53;

Table 5, giving the number of houses in the District of Columbia supplied with Potomac water;

Table 6, showing the number of miscellaneous water-takers.

Inspections	18,451
Leaks found	2,936
Leaks repaired	2,871
Wastes found	76
Warrants procured	65
Fines	\$95
Forfeits	\$100
Bonds taken	16
Cases dismissed	10
Bills delivered by inspectors	32,213
Water-main tax notices delivered by inspectors	811
Meters set during the year	22
Total number of meters in use	109

Very respectfully,

JNO. J. BEALL,
Chief Clerk, Water Department, District of Columbia.

Capt. W. T. ROSSELL,
Corps of Engineers, U. S. Army,
Engineer Commissioner, District of Columbia.

384 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

TABLE 1.—Statement of assessments and collection of water-main tax from July 1, 1878, to June 30, 1891.

Fiscal year.	Amount as- sessed.	Duplicate payments and over- payments.	Six per cent abate- ment.	Amount of tax can- celed sub- sequent to July 1, 1878.	Amount collected July 1, 1878, to June 30, 1891.	Amount outstand- ing July 1, 1891, sub- ject to ex- emption act of March 3, 1881.	Amount of collectible tax out- standing July 1, 1891.
(*).....	\$94,124.78	\$154.31		\$3,271.71	\$78,625.72	\$4,060.10	\$8,321.56
1879.....	11,488.89	38.96	\$138.54	79.24	10,419.09	53.68	837.30
1880.....	4,965.13		156.40		4,762.16		46.57
1881.....	7,775.35		265.78	316.07	6,521.42		672.08
1882.....	3,313.89		67.40		3,071.00		175.49
1883.....	3,495.75		91.62		3,395.67		8.46
1884.....	23,325.37		399.73	281.06	20,118.30		2,526.28
1885.....	27,492.36	.39	662.58		24,567.01		2,263.16
1886.....	40,547.79	2.00	1,311.03	1,003.72	33,669.43		4,565.61
1887.....	47,345.86	67.44	{ 1,458.17 }	{ 206.24 }	41,409.17		4,144.72
1888.....	21,594.48	342.60	{ † 195.00 }	{ 1,123.54 }	19,707.15		60.40
1889.....	51,240.96	35.91	{ 1,939.09 }	{ 1,384.50 }	41,982.07		5,942.46
1890.....	25,768.17	23.73	{ † 28.75 }	{ 873.05 }	18,806.69		5,076.33
1891.....	67,582.52	13.52	{ † 170.40 }	{ 5,305.25 }	40,298.70		19,919.30
Total.....	430,061.30	678.86	10,868.70	13,844.38	347,353.58	4,113.78	54,559.72

* Amount of tax outstanding and uncollected July 1, 1878.

† Amount of abatement allowed property owners on College Hill for amounts paid by them to R. A. Charles.

‡ Amount of abatement allowed on tax assessed in fiscal year ending June 30, 1890, but not paid until after July 1, 1890.

§ Eighty-six cents are deducted from abatement of this year on account of duplicate payment of tax on which abatement was allowed.

RECAPITULATION.

Total amount of assessments plus duplicate payments.....	\$430,740.16
Amount of abatement to 6 per cent	10,644.95
Amount of abatement allowed property owners on College Hill for amounts paid by them to R. A. Charles	223.75
Amount of tax canceled and struck off the books since July 1, 1878:	
By order of Commissioners District of Columbia, various dates.....	9,546.49
By reason of erroneous tax certificates	332.38
By act of Congress for relief of E. W. Patterson, approved June 13, 1885.....	215.68
By reason of subdivision of property	816.17
By amount charged against District of Columbia	1,391.79
By amount charged against the United States	610.30
By amount canceled by decision of supreme court, District of Columbia.....	901.57
By amount subject to exemption, act March 3, 1881	4,113.78
Amount of tax collected from July 1, 1878 to June 30, 1891	347,353.58
Amount outstanding July 1, 1891; collectible tax	54,559.72
	430,740.16

TABLE II.—Statement of receipts of the water department, District of Columbia, from July 1, 1878, to June 30, 1891.

Fiscal year.	Balance on hand July 1, 1878.	Mains to Government Printing Office.	Water-main tax.		Interest water-main tax.		Water rents.	Taps.	Permits and other sources.	Total receipts.
			Advertised.	Current.	Advertised.	Current.				
Balance on hand July 1, 1878.	\$16,809.42									\$16,809.42
Received year ending June 30—										
1879.			\$6,195.59	\$12,463.10	\$1,635.96	\$1,059.53	\$43,574.24	\$1,986.00	\$2,139.25	*69,053.67
1880.			10,248.87	11,926.81	3,457.43	1,340.18	165,641.42	1,980.00	2,188.10	196,782.81
1881.			3,200.38	18,368.39	1,228.94	4,040.08	109,737.83	1,851.00	1,915.72	†140,342.34
1882.		\$2,800.00	4,017.92	3,305.50	2,086.07	392.34	101,621.10	1,815.00	1,789.71	117,827.64
1883.		1,750.00	7,320.13	5,467.96	3,769.83	350.54	65,752.24	2,193.00	2,188.72	88,792.42
1884.			3,563.12	8,700.53	2,385.59	122.42	119,610.20	2,373.00	2,418.79	139,173.65
1885.			3,282.57	14,430.22	2,598.81	267.28	118,528.20	3,402.00	3,076.09	145,585.17
1886.			3,564.81	29,631.30	2,343.44	622.49	124,896.22	5,096.00	3,459.03	169,613.29
1887.			7,630.50	34,874.59	3,183.62	1,494.53	138,539.49	6,012.00	4,846.45	196,581.18
1888.			8,605.53	19,939.91	5,120.55	598.86	171,892.49	4,182.00	4,809.92	215,149.26
1889.			5,524.26	36,464.29	3,192.09	1,099.94	189,407.39	5,190.00	5,576.16	246,454.13
1890.			9,207.61	29,257.28	5,364.04	1,557.62	197,053.34	5,313.72	6,327.95	254,081.56
1891.			2,863.02	45,055.34	1,630.54	774.93	209,664.29	5,640.00	6,869.79	†272,497.01
Repayments during various fiscal years										1,266.49
Total	16,809.42	4,550.00	75,224.31	269,885.22	37,996.91	13,719.84	1,755,918.45	47,033.72	47,605.68	2,270,010.04

* This does not include \$12.50 which the United States Treasurer has credited to this year's receipts, but which does not appear on books of water department.

† December 10, 1880, there was collected \$10.75 on account of water-main tax (advertised), which sum was deposited to the credit of "arrears of general taxes."

‡ July 29, 1890, there was collected \$2 on account of water rents, which sum was deposited to the credit of general taxes, August 13, 1890.

TABLE III.—Expenditures.

Fiscal year.	Purchase of pump-house lot.	Extra clerical services making new water-rent books.	Purchase of new pumping engines and boilers.	Material and labor, pumping expenses, and pipe distribution.	Salaries water department.	Contingent expenses.	Water-rent refunded.	Water-main tax refunded.	Interest on water-main tax re-funded.	Erection of stand pipe.	Water-main to Government Printing Office.	Total expenditures.
Expended in—												
1879.....				\$44,871.89	\$7,710.00	\$506.09	\$164.51	\$29.12	\$9.07	\$29,395.40		\$82,686.08
1880.....				48,752.55	10,417.61	962.19	32,130.10	35.26	15.47	3,237.47		95,550.65
1881.....				52,781.67	10,830.00	1,141.10	284.69		5.55	1,580.39		66,623.40
1882.....				42,334.11	11,670.23		152.21	9.14	7.18			54,172.87
1883 on account of 1882.....				3,523.73								3,523.73
1883 on account of 1883.....				43,551.24	9,339.00	1,009.43	303.38	38.96	22.41		\$5,599.94	59,864.36
1884 on account of 1883.....				5,950.26		819.23						6,769.49
1884 on account of 1884.....				46,454.04	9,339.00	1,548.12	590.01	80.79	82.78		3,346.27	61,441.01
1885 on account of 1883.....				102.00		8.75						110.75
1885 on account of 1884.....				941.11		223.61						1,164.72
1885 on account of 1885.....				79,878.66	9,312.90	1,954.07	373.44					91,519.07
1886 on account of 1885.....				17,472.69		1,09.83						17,582.52
1886 on account of 1886.....				58,655.72	9,339.00	2,148.63	385.08					70,528.43
1887 on account of 1885.....						8.00						8.00
1887 on account of 1886.....				10,847.18		239.68						11,086.86
1887 on account of 1887.....				73,598.68	9,522.20	2,392.26	580.77	59.57				86,153.48
1887 on account of 1888.....				16,796.19								16,796.19
1888 on account of 1886.....				239.85								239.85
1888 on account of 1887.....				1,046.43		2.98						1,049.41
1888 on account of 1888.....			\$6,216.21	75,616.18	9,536.00	2,364.66	982.27	342.60				95,057.92
1889 on account of 1883.....				10.00								10.00
1889 on account of 1886.....												10.00
1889 on account of 1887.....				1,541.19		10.00						1,551.19
1889 on account of 1888.....				5,828.18		250.55						6,078.73
1889 on account of 1889.....	\$2,275.00		26,825.03	95,049.42	6.00	127.03						127,973.55
1890 on account of 1888.....					15,032.52	2,169.09	1,173.78	35.91				18,310.24
1890 on account of 1889.....						16.30						16.30
1890 on account of 1890.....				2,194.72		293.87						2,488.59
1891 on account of 1887.....				58,560.98	15,314.55	1,816.50	788.37	23.73	2.07			76,506.20
1891 on account of 1888.....				5.00		23.24						28.24
1891 on account of 1889.....						16.25						16.25
1891 on account of 1890.....						62.15						62.15
1891 on account of 1891.....				3,985.19		428.79						4,413.98
1891 on account of 1891.....				60,928.60	36,602.97	2,027.92	1,266.46	13.52				100,839.47
1891 on account of 1892.....		\$462.00			189.00							651.00
Total	2,275.00	462.00	33,041.24	851,517.46	164,160.98	22,680.32	39,175.07	668.60	144.53	34,213.26	8,946.21	1,157,284.67

TABLE IV.—*Advances to Treasurer of the United States.*

Fiscal year.	Interest and sinking fund, water-stock bonds.	Interest and sinking fund, increasing water supply.	Total interest and sinking fund.
Advanced to Treasurer United States, <i>ex officio</i> commissioner of sinking fund District of Columbia:			
1880	\$74,025.00	.....	\$74,025.00
1881	74,123.77	.....	74,123.77
1882	43,796.08	.....	43,796.08
1883	44,610.00	.....	44,610.00
1884	44,575.00	.....	44,575.00
1885	44,610.00	\$13,686.23	58,296.23
1886	31,485.00	55,047.27	86,532.27
1887	57,735.00	.....	57,735.00
1888	31,485.00	57,239.02	88,724.02
1889	44,610.00	76,655.69	121,265.69
1890	44,610.00	81,283.26	125,893.26
1891	44,610.00	71,164.21	115,774.21
Total	580,274.85	355,075.68	935,350.53

RECAPITULATION.

To amount collected, of which there has been deposited in the United States Treasury and credited to water fund, the sum of	\$2,270,010.04
By amount expended from July 1, 1878, to June 30, 1891	1,157,284.67
By amount advanced to Treasurer United States, <i>ex officio</i> commissioner sinking fund, District of Columbia, during said period	935,350.53
By amount collected on account of water-main tax and deposited to credit of general taxes, December 20, 1880	10.75
By amount collected on account of water rent, July 29, 1890, and deposited to the credit of general taxes, August 13, 1890	2.00
Balance to credit of water fund, District of Columbia, July 1, 1891	177,362.09
	2,270,010.04

TABLE V.—Houses in the District of Columbia supplied with Potomac water.

Front feet.	Two stories.					Three stories.					Four stories.					Five stories.				Six stories.		Eight stories.		Grand total.
	Georgetown.	Northwest.	Northeast.	Southwest.	Southeast.	Total.	Georgetown.	Northwest.	Northeast.	Southwest.	Southeast.	Total.	Georgetown.	Northwest.	Northeast.	Southwest.	Southeast.	Total.	Northwest.	Total.	Northwest.	Total.		
16 feet.....	636	6,167	1,939	2,333	1,633	12,708	132	1,732	638	242	227	2,971	5	538	4	6	2	9	558	17	18	.....	.....	16,255
17 feet.....	70	456	285	1,04	159	1,074	20	368	94	60	88	630	1	211	6	.....	5	6	224	14	17	.....	.....	1,945
18 feet.....	63	648	304	158	145	1,318	46	799	164	111	120	1,240	13	285	50	.....	.....	25	378	8	8	.....	.....	2,944
19 feet.....	19	211	102	33	30	1,395	11	475	73	9	69	1,637	4	194	7	.....	1	12	218	4	4	.....	.....	1,254
20 feet.....	153	941	113	187	246	1,640	77	860	126	99	133	1,295	26	714	57	.....	15	13	825	36	41	.....	.....	1,380
21 feet.....	35	148	24	34	35	276	24	185	15	22	22	268	6	146	24	.....	16	16	193	9	11	.....	.....	748
22 feet.....	43	196	34	52	52	377	29	311	26	46	40	452	7	230	16	.....	9	9	268	16	16	.....	.....	1,113
23 feet.....	18	67	12	12	14	123	27	129	11	12	12	191	8	136	4	.....	4	4	153	11	11	.....	.....	1,478
24 feet.....	27	85	14	35	28	189	27	194	16	17	5	259	6	215	9	.....	6	3	239	19	20	.....	.....	708
25 feet.....	16	124	20	30	18	208	27	275	12	23	17	354	10	304	7	.....	8	6	335	24	25	.....	.....	922
26 feet.....	5	46	7	3	8	69	12	277	2	6	6	303	4	91	4	.....	1	.....	100	16	17	.....	.....	489
27 feet.....	2	16	1	5	2	26	5	36	1	1	2	45	9	51	2	.....	.....	.....	64	14	14	.....	.....	149
28 feet.....	11	32	3	2	5	53	9	45	4	3	6	67	1	48	3	.....	1	1	54	7	7	.....	.....	181
29 feet.....	2	13	3	.....	.....	19	2	19	.....	.....	.....	21	4	19	.....	.....	.....	1	25	5	5	.....	.....	70
30 feet.....	6	36	.....	.....	.....	54	14	46	.....	.....	.....	68	2	54	.....	.....	.....	2	61	3	3	.....	.....	186
31 feet.....	.....	.....	.....	.....	.....	2	2	19	.....	.....	.....	22	.....	12	2	.....	1	.....	15	1	1	.....	.....	40
32 feet.....	4	5	.....	.....	.....	13	5	13	.....	.....	.....	25	.....	14	.....	.....	.....	.....	17	2	2	.....	.....	57
33 feet.....	4	2	2	.....	.....	14	5	11	.....	.....	.....	18	.....	10	.....	.....	.....	.....	11	1	1	.....	.....	44
34 feet.....	3	7	2	.....	.....	15	4	10	.....	.....	.....	17	.....	18	.....	.....	.....	.....	19	1	1	.....	.....	51
35 feet.....	3	9	1	.....	.....	18	4	18	.....	.....	.....	25	.....	16	.....	.....	.....	.....	16	.....	.....	.....	.....	61
36 feet.....	.....	.....	3	.....	.....	8	3	26	.....	.....	.....	32	.....	15	.....	.....	.....	.....	17	.....	.....	.....	.....	58
37 feet.....	.....	.....	.....	.....	.....	4	2	1	.....	.....	.....	5	.....	2	.....	.....	.....	.....	4	.....	.....	.....	.....	14
38 feet.....	.....	.....	.....	.....	.....	9	2	1	.....	.....	.....	9	.....	2	.....	.....	.....	.....	26	.....	.....	.....	.....	49
39 feet.....	.....	.....	.....	.....	.....	4	1	12	.....	.....	.....	13	.....	24	.....	.....	.....	.....	11	.....	.....	.....	.....	26
40 feet.....	.....	.....	.....	.....	.....	5	2	4	.....	.....	.....	9	.....	11	.....	.....	.....	.....	54	.....	.....	.....	.....	111
41 feet.....	.....	.....	.....	.....	.....	20	6	26	.....	.....	.....	35	.....	10	.....	.....	.....	.....	10	.....	.....	.....	.....	18
42 feet.....	.....	.....	.....	.....	.....	8	.....	7	.....	.....	.....	6	.....	14	.....	.....	.....	.....	15	.....	.....	.....	.....	33
43 feet.....	.....	.....	.....	.....	.....	5	.....	3	.....	.....	.....	4	.....	8	.....	.....	.....	.....	8	.....	.....	.....	.....	19
44 feet.....	.....	.....	.....	.....	.....	4	.....	7	.....	.....	.....	8	.....	6	.....	.....	.....	.....	7	.....	.....	.....	.....	19
45 feet.....	.....	.....	.....	.....	.....	8	.....	7	.....	.....	.....	9	.....	23	.....	.....	.....	.....	24	.....	.....	.....	.....	42
46 feet.....	.....	.....	.....	.....	.....	2	.....	3	.....	.....	.....	3	.....	10	.....	.....	.....	.....	11	.....	.....	.....	.....	18
47 feet.....	.....	.....	.....	.....	.....	2	.....	6	.....	.....	.....	2	.....	4	.....	.....	.....	.....	4	.....	.....	.....	.....	8
48 feet.....	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	8	.....	6	.....	.....	.....	.....	6	.....	.....	.....	.....	18
49 feet.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	2	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	3
50 feet.....	.....	.....	.....	.....	.....	1	.....	13	.....	.....	.....	17	.....	18	.....	.....	.....	.....	21	.....	.....	.....	.....	51
51 feet.....	.....	.....	.....	.....	.....	6	.....	1	.....	.....	.....	1	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	5
52 feet.....	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	2	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	5

[illegible]

TABLE VI.—*Miscellaneous water takers.*

	George- town.	North- west.	North- east.	South- west.	South- east.	Total.
Armories		6				6
Barber shops	4	103	8	7	6	128
Bakeries	7	45	7	18	9	86
Banks	2	13				15
Barrooms	12	249	28	64	34	387
Boarding houses	2	98	34		6	140
Breweries		2	2	1	1	6
Bottling depots	1	6	2	6	1	16
Bookbinderies		4				4
Baths	1	2				3
Churches	9	51	5	10	8	83
Colleges	1	12				13
Club rooms		9				9
Dining rooms		22				22
Dye houses	1	14				15
Florists		3			1	4
Foundries	3	5	2			10
Gas engines		3	1	1		5
Greenhouses	2	7	3		1	13
Halls	3	43		3	5	54
Hotels	1	39				40
Hospitals		3		1	1	5
Laundries	1	33	1	3	3	41
Manufactories	1	14	1		1	17
Convents	1	1				2
Car stables	2	4	2	3	2	13
Market houses	1	4			1	6
Mills	5	3	1	2		11
Orphan asylums		5				5
Offices	13	765	5	6	7	796
Printing houses		14	1			15
Police stations	1	4	2	1	1	9
Photograph galleries		25				25
Restaurants	6	226	3	5	0	249
Railroad stations		2	1			3
Stables, livery	3	52	3	1	5	64
Stables, private	45	624	56	9	28	762
Schools, public	5	34	12	4	0	61
Schools, private	1	23	2	2	1	29
Shops	9	128	6	7	7	157
Steam boilers		57	2	1		60
Steam engines	15	65	4	11	5	102
Slaughter houses		2	3			5
Stores	363	1,011	20	66	90	1,550
Stone yards		6	4	2		12
Theaters		4				4
Warehouses	5	32	3	7	5	52
Wood and coal yards		15	3	1	7	26
Brick yards			1		3	4
Museums				3		3
Steamboat wharves				6		6
Factories	1				2	3
Riding schools		2				2
Engine houses	1	4	1	1	2	9
Truck Company A			1			1
Truck Company B			1			1
Asylums	1		2			3
Baseball grounds		1				1
Motors		1				1
Total	529	3,900	235	252	258	5,174

These tables may be summarized as follows:

	Houses supplied with Potomac water for domestic pur- poses.		Miscellaneous water takers.	
	Number.	Per cent.	Number.	Per cent.
Georgetown	1,775	.0554	529	.1022
Northwest section	19,048	.5939	3,900	.7538
Northeast section	4,254	.1326	235	.0454
Southwest section	3,718	.1159	252	.0487
Southeast section	3,279	.1022	258	.0499
Total	32,074	.....	5,174	.....

REPORT OF THE SURVEYOR, DISTRICT OF COLUMBIA.

OFFICE OF THE SURVEYOR, DISTRICT OF COLUMBIA,
Washington, D. C., July 29, 1891.

GENTLEMEN: I have the honor herewith to submit report of the transactions of this office for the fiscal year ending June 30, 1891. During that period 926 orders for surveys were received from private parties and 250 subdivisions recorded and certified copies issued.

Services were performed for the District of Columbia, per order honorable Commissioners, as follows, viz: 16 surveys of lots, streets, alleys and lots for public schools. Four plats of opening and dedication of new streets, etc., embracing extension of Connecticut avenue, Truxton Circle, Twenty-third, Twenty-eighth, Thirtieth, Thirty-first, Thirty-second, Thirty-third, Q, R, T, and W, and Thirty-seventh streets, West Washington, were recorded.

Investigation and report upon streets and alleys referred to the surveyor, 20; maps, plats, and tracings, 10; survey of part of Washington Asylum grounds.

Plats of current subdivisions, Washington, Georgetown, and the county, are regularly duplicated and areas computed, for the use and guidance of the assessors and water offices, the plat books kept up to date as subdivisions are recorded and other services rendered to the respective offices of the District as called for.

I beg leave again to call attention to the condition of the original records of this office, and in connection therewith I quote from my annual report for the year ending June 30, 1883:

"I recommend that an appropriation be asked for to have duplicate copies made of those records not already copied and the duplicates already made carefully compared and verified, so that they can receive the official certificate of the surveyor of the District of Columbia attesting their correctness. This would give them official status, and in this way the originals (which should only be used in cases of litigation) could be preserved for many years. The books have been rebound so often and in many instances the paper cut so close to the writing as not to allow any more to be cut therefrom without completely obliterating the official certificates."

To properly perform the work required in copying said records I would suggest that an appropriation of \$2,600 per annum be asked for until the work is completed. This sum is necessary for the employment of a competent draftsman, at \$1,400 per annum, and a clerk, at \$1,200 per annum, to assist in the performance of the work generally and the verification of the copies.

I again respectfully renew the request for an appropriation of \$500 for binding and mounting on linen such records as can be saved in this manner and for the purchase of additional files for their accommodation.

Very respectfully, your obedient servant,

WM. FORSYTH,
Surveyor, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

REPORT OF THE ENGINEER IN CHARGE OF THE SURVEYS OF SUBDIVISION OF LANDS.

OFFICE OF THE ENGINEER COMMISSIONER, DISTRICT OF COLUMBIA,
Washington, D. C., July —, 1891.

SIR: I have the honor to present the following report of the work of surveys for the subdivision of land under my charge for the year ending June 30, 1891:

WORK DONE.

During the year sixteen subdivisions have been examined and approved, as in conformity with the "general plan of the city of Washington." Surveys have been made, lines given upon the ground, and plats prepared, showing the positions of projected streets with relation to private properties in fifteen cases where no subdivisions have as yet been made. Numerous lines have been run for the purpose of connecting existing subdivisions with each other and with the city, in order that they might be plotted upon the general map of the District.

Surveys have been made and a map prepared showing the line of Massachusetts avenue from Rock Creek to the American University, upon which it is expected that right of way will be obtained from owners without cost to the District. A satisfactory method of passing the grounds of the new Naval Observatory has, however, not

yet been determined. The line of Sixteenth street has been extended from the city to its intersection with the northeast boundary of the District of Columbia, the west line of this street having been adopted as the eastern boundary of the Rock Creek Park, northward from the Blagden mill road to the District boundary. A survey is also partially completed of the course of Sixteenth street through Mount Pleasant from Florida avenue to Piney Branch, which will show the private property to be taken in the proposed opening of the street.

EXISTING SUBDIVISIONS.

A small scale map of the District has been prepared showing the positions of streets in subdivisions existing or approved before July 1, 1891. A copy of this map is herewith submitted; it shows the suburban subdivisions as divided into three classes: (1) Those approved during the year; (2) those previously existing which are in accord with the general plan of the city of Washington; (3) those not in accord with the general plan of the city of Washington.

In the subdivisions approved during the year deviations from the usual straight extension of city streets have been permitted in three instances. In the Palisades of the Potomac, the streets running east and west have been deflected at the Conduit road from a straight line, and westward from that road have been made approximately perpendicular to its course. It was considered in this case that the topography rendered a subdivision on the true lines impracticable, and that in consequence of the position of the property upon the bluff overlooking the river these streets could not be continued farther, and hence the change was not important. In the Ingleside subdivision it is understood that the reason for the change was the difficulty of subdividing under the regular system due to the topography of the region. In the case of Brightwood Park it was decided to continue the plan of the Petworth subdivision (which had previously been laid out by the surveyor of the District of Columbia upon the magnetic instead of the true meridian) to the Shepherd road, and there change to the city system.

Among the subdivisions existing at the beginning of the year there are several which, while not strictly in conformity with the city system, may be accepted as in conformity and are so shown, in consequence of the fact that they lie in such shape that their streets may be made portions of continuous streets of the regular system by deflecting such streets at the boundaries of the subdivisions. This is true of Petworth, including Brightwood Park, and of the various Brookland subdivisions.

The subdivisions shown upon the map as not in accord with the city plan are in general laid out irregularly, with no regard to the continuity of streets through adjacent subdivisions, and therefore seem to admit of no rectification save by ignoring the lines of streets now existing, and condemning through private property such streets of the city system as may seem necessary to give proper communication and to reduce to some order the general confusion now prevailing. In this connection attention is called to the necessity for some immediate action with regard to these irregular subdivisions, especially those lying near the city, and through which is reached a large portion of the District in which improvements are now being made, for not only will delay largely increase the cost of any change when it does come, but there is at present an element of uncertainty surrounding the whole matter which prevents the formation of any rational plan for new subdivisions in the vicinity of those to be changed, and may lead to new complications in the future.

FUTURE WORK.

The law regulating the subdivision of land has now been in operation for two years. That it has been of great benefit in discontinuing the former irregular manner of subdivision and in introducing system into the laying out and naming of streets, as well as in securing proper widths for new streets, is evident. It is also evident, however, that our present force is quite inadequate to the work it has in hand, that all is not being accomplished that should be, and that if the work is to be continued upon its present basis a considerable increase of appropriation will be necessary to meet the requirements of the present rate of suburban improvement. A draftsman should be regularly employed, and one additional field party at least. This would admit of keeping up with current work, and also of gradually getting together the data for and making a detail map of the District, showing all existing streets with the contours of the surface, upon which new streets may be projected and the value of proposed subdivisions be readily determined. The making of such a map would be a work of considerable magnitude, and requiring much field work to satisfactorily locate the various isolated subdivisions.

It is also suggested that it would be well to have center levels run over all new streets, profiles made, and tentative grades established by this office, as a guide in

considering the practicability or advisability of extensions of the same streets. These profiles could also be furnished to the computing engineer for use in placing permanent grades for the improvement of such streets.

Attention is again called to the necessity by some means of permanently marking the lines of streets in new subdivisions. In many of the late subdivisions owners have in their own interest established permanent corners, but there are others which practically exist only upon paper, and may in the future be very difficult to reestablish. It has heretofore been proposed that persons making subdivisions should be required to set permanent stones upon all block corners. If in the opinion of the Commissioners such action be not advisable, provision should be made by which this department could establish such marks in each case as might seem necessary to prevent the loss of lines of the new streets.

The general requirements of the Commissioners regarding new streets is that they shall, in so far as practicable, be exact extensions of existing streets. Many cases will occur, however, in which deviations from such lines must be made in the public interest to save undue expense in the grading of minor streets and to obtain practicable thoroughfares in rough sections. It is also considered of first importance that the system of diagonal avenues should be extended and that new avenues should be laid out upon the most available lines to facilitate communication in all directions throughout the District. In order, therefore, that future subdivisions should be regulated to the best advantage, it is essential that a careful and comprehensive study be made of the whole subject, the topographical features and local needs of each section being duly considered, and that a complete plan be formed, and all subdivisions be then required to form a part of that general plan. To such an intelligent study of the subject a large scale map of the District and detailed surveys of existing streets, as already outlined, would be a first necessity.

It may be noted in this connection that the subdivision of the outlying parts of the District is now progressing at a very rapid rate; and whether or not the improvement and occupation by residence of these new subdivisions will be as rapid as is predicted by their promoters, the fact remains that this development, when it does come, is to be upon the lines now being laid down, and a proper regard for economy, as well as for the symmetry and beauty of this great city of the future, suggests a careful consideration now of the best means of controlling that most important factor in its well-being, the plan upon which it is to be built.

Very respectfully submitted.

FRED. P. SPALDING,
Engineer in Charge.

Capt. WM. T. ROSSELL,
Corps of Engineers, U. S. Army,
Assistant Engineer Commissioner, District of Columbia.

SPECIFICATIONS FOR STANDARD PAVEMENTS AND STREET CONSTRUCTION MATERIAL.

SPECIFICATIONS FOR GRANITE CURB.

6 BY 20 STANDARD GRANITE CURB.

The curb must be of good and acceptable texture and color, dressed straight down 12 inches on face, 3 inches on back, and chiseled 6 inches deep on joint, with no projection beyond the chiseled portion of the joint. The joints must be perfectly close fitting—cut at a true right angle to face and top. Joints which are at all open will not be accepted. The top will be beveled one-quarter of an inch. The face and top to be true plane surfaces, without bends, twists, depressions, cups, or other irregularities. The face must be cut to a perfectly true line, to be tested with a straight-edge. The angle between face and top to be well defined. The length must not be less than 6 nor more than 12 feet; depth not less than 20 nor more than 24 inches in any portion of a piece. The bed of the curb must not be less than 6 inches. No excessive protuberances on sides will be allowed.

SPECIAL 8 BY 8 GRANITE CURB.

The same specifications for special 8 by 8 curb will hold as above given for standard 6 by 20 curb, with the exception of dimensions and bed, which will be as follows: Width, 8 inches; depth, not less than 8 nor more than 10 inches. The bed will be rough dressed, to give a secure bearing.

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CIRCULAR CURB.

Circular curb will conform in all respects to the above specifications, except as to lengths. By far the larger amount of circular curb will be cut to 6-foot radius in lengths of 4 feet 8 $\frac{1}{4}$ inches, but the contractor must be prepared to cut to such radius and in such lengths as may be required.

SAMPLES.

Each bidder must submit a sample of his stone not less than 2 feet long, and all deliveries must conform to this sample.

SPECIFICATIONS FOR GRANITE PAVING BLOCKS.

(1) The blocks may be of any syenite or granite equal in quality to what is known as Quincy granite, of uniform fine grain and texture, without lamination or stratification, and free from excess of mica or feldspar. Soft or weather-worn stones from the surface of the quarry or stones that will wear smooth under traffic will not be accepted.

(2) The blocks must be of the following dimensions, viz: In length, not more than 8 nor less than 6 inches; in width, not more than 4 nor less than 3 inches; in depth, not more than 6 nor less than 5 $\frac{1}{4}$ inches, and the average size shall be such that not more than 42 shall be required to lay a square yard of pavement. They must be sufficiently dressed to present rectangular faces, with straight edges on top, bottom, and sides, and all blocks whose faces vary more than half an inch from a rectangular shape will be rejected. The sides and ends of the blocks must be so dressed that they will make close-fitting joints, and any block which has a greater projection than half an inch will be rejected. Should block be delivered which run more than 42 to the yard, a corresponding deduction will be made in payment.

PAVING AND ARCH BRICKS.

SPECIFICATIONS.

Sidewalk paving bricks shall be of uniform size, 8 $\frac{1}{4}$ by 4 by 2 $\frac{1}{4}$ inches, hard burned throughout, without flaws or cracks, and square and true on edges.

Arch bricks shall be of dimensions 8 $\frac{1}{4}$ by 4 by 2 $\frac{1}{4}$ inches, hard burned throughout, sound and true, and regular shape.

No swelled bricks or soft or salmon bricks will be allowed.

Specimens will be submitted with proposal, to which deliveries must conform.

Proposals for bricks of a size different from those mentioned above will be received and comparison made with other bids, taking size into consideration; but in all cases the bricks furnished must be equal to sample submitted with proposal.

QUANTITY AND DELIVERY.

Bricks will be delivered along line of work, where they will be receipted for by a District employé or contractor, and these receipts must be presented with bills.

It is estimated that there will be required 3,000,000 paving bricks and 250,000 arch bricks; but the right is reserved to vary these figures 25 per cent.

Bricks will be delivered in such quantities as may from time to time be ordered. It is likely that 2,000,000 will be required before December 1.

Failure at any time to deliver the required amount will be considered sufficient grounds for annulling the contract, as provided in paragraph 1 of general stipulations.

For the convenience of out-of-town bidders delivery may be made to a District property yard, situated contiguous to the railroads and river front. In such cases they will be properly piled in such manner and place as the Commissioners or their agent may direct. The contractor will furnish all labor necessary to assist inspector in inspecting and counting the bricks. All expense attending unloading and inspecting will be at expense of contractor.

In comparing price of brick delivered on line of work and bricks delivered in property yard, \$1.75 will be added to price per thousand of bricks delivered in property yard to pay cost of haul to place where used.

Bricks delivered in property yard will be paid for upon count of District inspector.

SPECIFICATIONS FOR ASPHALT PAVING BLOCKS AND TILES.

ASPHALT PAVING BLOCKS.

- (1) The size of the blocks will be 4 by 5 by 12 inches, and a variation of one-fourth of an inch from these dimensions will be sufficient grounds for rejecting any block.
- (2) Blocks must be square and true on edges. Chipped and rough-edged blocks will be rejected.
- (3) The blocks will be composed of paving cement, 11 to 15 per cent; crushed limestone, 89 to 85 per cent, of which about 50 per cent shall be coarser than 20 meshes to the inch.
- (4) The paving cement will be an admixture of refined Trinidad asphalt with the residual oil obtained from the distillation of petroleum. No product of the distillation of coal tar will be permitted. The right is reserved to inspect the manufacture of the blocks at any time.
- (5) The blocks must be equal to any ever laid in the District and satisfactory in every respect to the Engineer Commissioner.

ASPHALT PAVING TILES.

- (1) The materials composing the tiles will be the same as for asphalt paving blocks.
- (2) The tiles will be of two sizes, square 8 by 8 by 2.5 inches and hexagonal 4.64 inches on the side and 8 inches between parallel sides and 2.5 inches thick.
- (3) Tiles must conform to specifications for blocks in all particulars excepting size.

VITRIFIED PAVING BRICKS.

SPECIFICATIONS.

The bricks to be furnished must possess such qualities in regard to hardness, toughness, and durability as to especially fit them for use in paving streets, gutters, alleys, etc.

Bricks will be 9 by 4 by 2.5 inches. Proposals for bricks of a smaller size will be considered, but an allowance will be made when compared with proposals for full-size brick.

Bricks will be thoroughly hard, well and uniformly burned, and free from warps and fire cracks. Surfaces must be true and corners square.

Samples must accompany each proposal, and all brick delivered will be strictly held to conform to such sample.

APPROXIMATE QUANTITY.

It is estimated that there will be required 400,000 brick, but the right is reserved to increase or diminish the above amount 33 $\frac{1}{3}$ per cent. Ten days' notice will be given of such change. Bids for a smaller number than the above will be considered.

CONDITIONS OF DELIVERY.

Bricks will be delivered and piled in the District property yards in a manner satisfactory to the Engineer Commissioner or his agents. Such delivery and piling will be at the expense of the contractor, and the District will assume no responsibility before such piling. These property yards are situated contiguous to the railroads (switches running into same) and along river front.

Bricks will be piled at such points as may be designated, the distance of hauling in no case exceeding 500 feet from siding.

An inspector will be detailed who will inspect and count all bricks delivered, and upon such count only will payment be made. All labor necessary for such inspection and count will be furnished by the contractor.

Bidders will state when delivery can be made and rate at which it can be prosecuted. Time of delivery will be an essential element in awarding contract.

SPECIFICATIONS FOR GRADING.

- (1) Lines and grade will be established by the Engineer Commissioner, and no work will be commenced until these are given.
- (2) All material excavated, of whatsoever nature, is the property of the District, and will be disposed of as the Engineer Commissioner shall direct.

(3) The filling will be done in layers not exceeding 12 inches in thickness, and all material used for this purpose will be subject to approval. If improper or unsuitable material be used, it will be removed at the cost of the contractor.

(4) All measurements will be made in place, and payments made thereon.

(5) The price bid for grading is to cover the cost of removing trees, stumps, and brushwood, for which no extra allowance will be made.

SPECIFICATIONS FOR GRAVEL ROADWAY.

(1) The roadway upon which the gravel is to be laid will be dressed to an even surface sloping from the center to the lines of the gutters. The surface will be 6 inches below the top of the gutter at the center and 10 inches below the top of the gutter at the edge of the gutter, and thoroughly rolled.

(2) Upon the bed thus prepared the gravel will be laid of such thickness that when thoroughly rolled it will be 10 inches deep at the center and 8 inches at the sides, and rounded from side to side. It will be laid in two equal layers, and each layer will be rolled with a roller weighing not less than 5,000 pounds until the gravel is thoroughly packed and has a firm, even surface. The amount of rolling necessary for this is about ten hours for every thousand yards of surface for each layer.

(3) The gravel must be free from loam. No stone in the bottom layer shall be of larger dimensions than $2\frac{1}{2}$ inches. No stone in the top layer shall be of larger dimensions than $1\frac{1}{2}$ inches.

SPECIFICATIONS FOR LAYING COBBLE GUTTERS AND CROSSINGS.

(1) The cobblestone and flagging will be furnished by the District, on the line of work. This material will generally be furnished from other streets under improvement, but in case this cannot conveniently be done, the contractor will bid a price for hauling such material to his work.

(2) The materials necessary to be removed will be excavated to a depth of 12 inches below the top line of the proposed gutter or crossing when fully packed. Any objectionable or unsuitable material below the bed will be removed, and the space filled with clean sand or gravel.

(3) All holes or inequalities will be filled to a proper level with sand or gravel well compacted by rolling or ramming. Upon the foundation thus prepared will be laid a bed of good gravel 5 inches in thickness, thoroughly compacted by rolling or ramming. Upon this will be spread a layer of clean, sharp sand, to serve as a bed for the paving stones, of such depth as may be required to bring the work to grade.

(4) The cobblestones will be assorted as they are brought upon the ground, and no stones that are less than 4 or more than 6 inches long or less than 2 or more than 4 inches wide will be used, and the several sizes will be laid so as to make an even surface when rammed. When thus laid the stones shall be immediately covered with clean, fine sand, in proper quantities, and raked until the joints become filled therewith; the stones shall then be thoroughly rammed to a firm, unyielding bed, with a uniform surface and proper grade.

(5) The foundation for the gutter and crossing flag shall be prepared in the same manner as described for cobble, upon which the flag will be laid, with close joints, and settled into place solidly in such manner as not to fracture the flag.

SPECIFICATIONS FOR SETTING GRANITE AND BLUESTONE CURB.

STANDARD GRANITE AND BLUESTONE CURB.

(1) All curb will be furnished by the District at the property yard, and will be hauled at the expense of the contractor.

(2) The trench will be dug 24 inches deep and 18 inches wide, to permit of thorough ramming. A bed of gravel 4 inches deep will be laid in the bottom of the trench and thoroughly consolidated. On this bed the curb will be laid to level and grade, with close joints and even and continuous surfaces.

(3) The ditch will then be filled with gravel, the first filling to be not more than 3 inches deep, be well rammed by rammers or bars, so as to give the curb a solid bearing under its entire length. Other layers will then be rammed in the ditch to within 10 inches of the top of the curb; the layers for each ramming to be not more than 4 inches deep.

SPECIFICATIONS FOR IMPROVING ROADWAYS.

MACADAM PAVEMENT.

(1) Macadam pavements will be $12\frac{1}{2}$ inches thick when fully compressed, and will be laid in three courses, the two lower courses each being 6 inches thick when compressed and the top course one-half inch.

(2) The space over which the pavement is to be laid will be excavated to the depth of 12½ inches below the top line of the proposed new pavement when fully compressed. Should there be any spongy material or vegetable matter in the bed thus prepared, all such material will be removed and the space filled with clean gravel or sand. Care must be taken in excavating to preserve the proper crown parallel to the surface of the street when completed; all holes and inequalities to be filled to a proper level with sand or gravel only, such filling to be well and faithfully compacted by rolling or ramming, and the entire roadbed will be thoroughly compacted by rolling and ramming so as to present a smooth and regular surface.

(3) On this bed the metal for the first course will be spread in a uniform layer of such thickness as to give a depth of 6 inches when thoroughly compacted. This layer will then be compacted by rolling and ramming in such places as the roller can not reach; the roller will either be a steam roller or horse roller, its weight being not less than 5,000 pounds, and its width such that the weight per inch of run will not be less than 125 pounds. The District will furnish, if desired, a suitable roller weighing about 10,500 pounds, made of iron, with grooves, and requiring 5 or 6 horses for its proper use, according to grade. The rolling will be continued until the stone ceases to sink under the roller or to creep in front of it; the amount of rolling will not be less than ten hours to each 1,000 yards of surface.

(4) The second course of metal will be spread on the first course in a uniform layer of the same depth as before, and after being thoroughly wet, either by hose or a sprinkling cart, will be rolled and rammed in precisely the same manner and to the same extent as the first course.

(5) The size of metal in the first and second courses will be such that it will pass through a ring 2½ inches in diameter; *i. e.*, the largest dimensions of any stone must not exceed 2½ inches. Any stone larger than this will be absolutely rejected, and must be either removed from the street or rebroken to proper size by the contractor. The material for the top course will be fine gravel, varying in size from one-eighth to three-fourths of an inch in their largest dimensions, or it may be composed of the finer particles of stone obtained by screening the stone for the lower courses. These particles of stone will be of the same size as the gravel above mentioned. If so ordered by the Engineer Commissioner, the material for the top course may have mixed with it such a proportion of loam or binding material as he may direct. All gravel for the top course larger than that specified shall be removed from the material before it is hauled to the street. Stone dust will not be used for a top course.

(6) The material for the top course will be spread upon the second course in a uniform layer 1 inch in thickness, and after being thoroughly wet by means of a hose or sprinkling cart will be rolled and rammed in the same manner and to the same extent as the first and second courses.

(7) The stone for the first and second courses must be of hard and compact texture and uniform grain. Blue rock (gneiss), trap, granite, flint (quartz), and the harder varieties of limestone will be accepted. Bidders will submit with their bids samples of the stone which they propose to furnish, and all stone which does not equal the sample in quality and size will be rejected. The stone must have on all sides a rough surface obtained by fracture. Water-worn pebbles and broken cobblestones will not be accepted. The stone preferred is the harder variety of compact gneiss found on certain portions of Rock Creek, Piney Branch, Broad Branch, and other streams north of the boundary. Disintegrated and weather-worn stones from the surface of the quarry will not be accepted.

SPECIFICATIONS FOR TELFORD MACADAM ROADWAY.

(1) *Material.*—The stone for the foundation of the pavement shall be sound, hard, and durable quarry stone, each from 6 to 8 inches in depth, from 3 to 6 inches in width, and from 6 to 14 inches in length, and of a sufficiently uniform size to be acceptable.

(2) The roadbed shall be prepared as prescribed for macadam pavement, except that the bed shall be 14 inches below the surface of the finished roadway.

(3) The foundation stones shall be laid by hand in the form of a close, firm pavement. They shall be set on their broadest edges lengthwise across the road. All the projections and irregularities of the upper part of the pavement shall be broken off with a hammer. The spalls or chips, together with broken stone or screened gravel, shall then be spread on the base in sufficient quantity to fill all irregularities and present an even surface, with the required thickness. The base shall then be thoroughly rolled. The stone foundation must be in a compact and satisfactory condition in every respect at the time of the spreading of the broken stone.

(4) On this shall be spread a layer of macadam to such a depth as will make a thickness of 5 inches when thoroughly compacted. This layer shall be composed of material of the same size and quality as is prescribed for macadam roadways, and shall be rolled in the same manner and for the same length of time,

(5) The top layer shall be composed of the same materials, shall be laid in the same manner, and rolled in the same way and for the same length of time as is prescribed for macadam roadways.

(6) The roadway, when completed, shall be at each point of such construction and at least of such depth as required by the specifications and of such crown and form of gutter as shall be directed, and in any case the thickness of the pavement is to be determined on a line at right angles to the grade and crown.

(7) The metal for macadam must be clean and free from dust, spalls, etc.

SPECIFICATIONS FOR SETTING GRANITE AND BLUESTONE CURB.

STANDARD GRANITE AND BLUESTONE CURB.

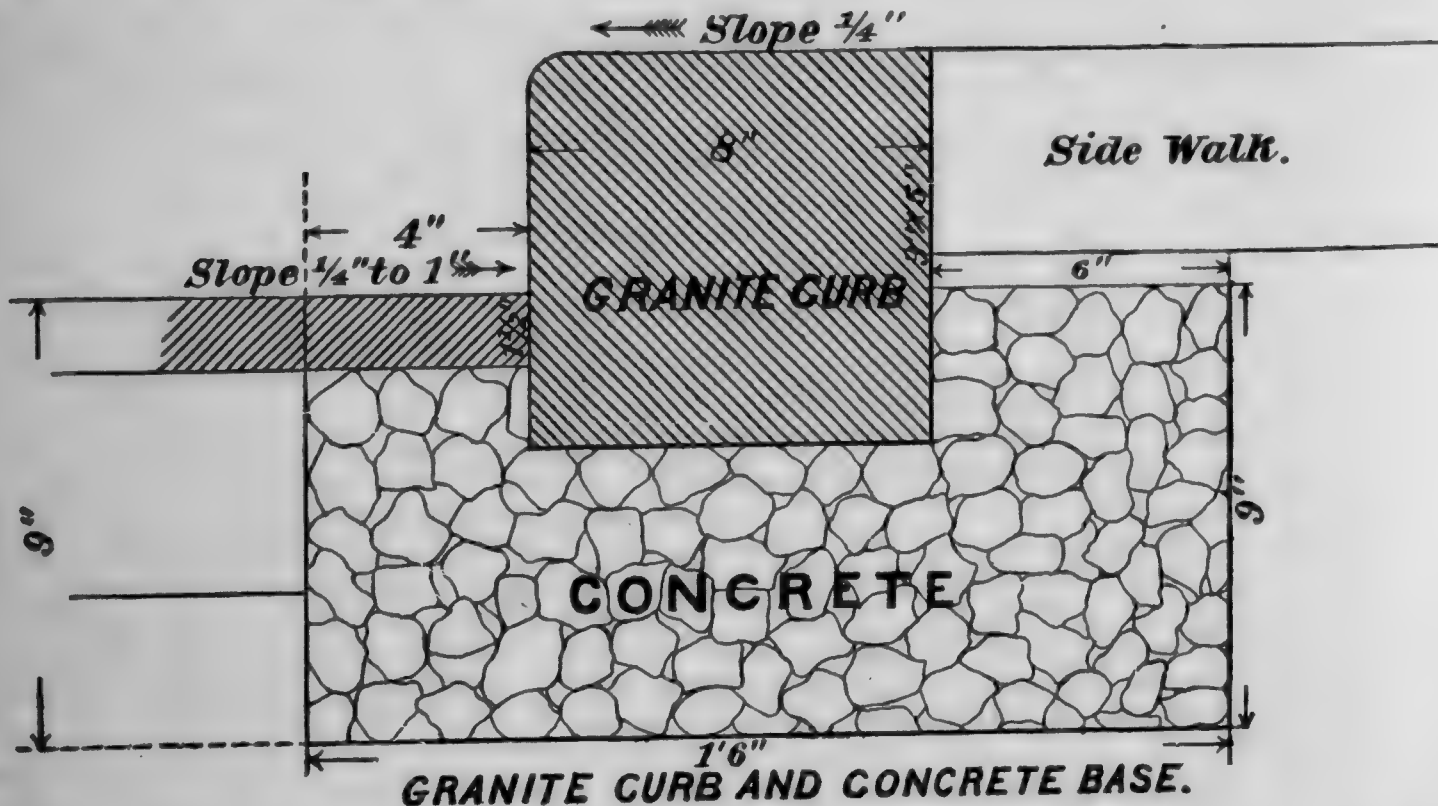
(1) All curb will be furnished by the District at the property yard and will be hauled at the expense of the contractor.

(2) The trench will be dug 24 inches deep and 18 inches wide, to permit of thorough ramming. A bed of gravel 4 inches deep will be laid in the bottom of the trench and thoroughly consolidated. On this bed the curb will be laid to level and grade, with close joints and even and continuous surfaces.

(3) The ditch will then be filled with gravel, the first filling to be not more than 3 inches deep, be well rammed by rammers or bars, so as to give the curb a solid bearing under its entire length. Other layers will then be rammed in the ditch to within 10 inches of the top of the curb, the layers for each ramming to be not more than 4 inches deep.

SPECIAL GRANITE CURB.

(1) The special granite curb will be laid on a foundation of hydraulic concrete, as shown by the following drawing:



(2) The bed will be prepared as prescribed for carriageway pavements. On this bed the concrete foundation will be laid as prescribed for concrete base for standard asphalt pavements.

(3) The curb will be laid before the concrete has set, so that it can be settled to a firm bearing and brought to proper grade.

(4) If so desired, the contractor will be authorized to finish the foundation in front of the curb with a layer of binder, as prescribed for the intermediate course in coal-tar distillate pavements, but no extra allowance will be made for such work.

SPECIFICATIONS FOR COMBINATION CURB AND GUTTER.

(1) A combination curb and gutter of artificial stone on a concrete foundation will be laid on streets as may be ordered by the Engineer Commissioner.

(2) The curb, gutter, and foundation will conform with the dimensions given on drawing on file in the Engineer Department.

(3) The concrete foundation will be composed of the same materials and will be laid in the same manner as prescribed for concrete foundations of asphalt pavements.

(4) The curb and gutter will consist of fine concrete composed of one part Portland cement, two parts clean, sharp sand, and three parts clean broken stone, not more than 1 inch in their largest dimensions.

(5) The exposed surfaces of both gutter and curb will be coated $1\frac{1}{2}$ inches thick with a cement composed of three parts granulated granite (the fragments being of such size as to pass through a quarter-inch screen and free from all dust) and two parts of cement.

(6) The cement used in the manufacture of the curb and gutter must conform to the current District of Columbia specifications for slow-setting Portland cement.

(7) The work will be carried on uniformly, and the whole curb completed while in a soft and plastic state, so that it will become a homogeneous solid when set.

(8) While still plastic, the curb and gutter will be saw-cut at intervals of 8 or 10 feet, as may be ordered, to allow for expansion and contraction and to give the appearance of cut stone.

(9) Contractors may use such methods of molding the curb into shape as they may deem best fitted for the work. The curb and gutter when set must conform with the cross-section shown in drawing.

(10) A conduit for electrical conductors, 4 inches wide and 4 inches high, will be left at the base of the curb if so ordered by the Engineer Commissioner. Handholes, to give access to this conduit, will be left at intervals of 50 feet, more or less, as may be ordered, all as shown on drawing. Manholes will be constructed near each cross street in accordance with plans and specifications on file in the Engineer Department. The exact location of each manhole will be fixed by the Engineer Commissioner, District of Columbia. The cost of these man and hand-holes, and their frames and covers, must be included in the price per linear foot of the "combination curb and gutter with electrical conduit."

(11) The curb and gutter must be properly protected from injury while setting, and the material used for such protection must be removed within twenty-one days from the completion of the work, if so ordered.

(12) The contractor is required by law to guarantee all work for the period of five years from the date of the completion of the contract.

SPECIFICATIONS FOR LAYING SIDEWALKS.

BRICK OR TILE SIDEWALKS.

(1) Brick or tile pavements will be laid on a foundation of gravel and sand. The brick and tile will be furnished by the District the brick delivered on the line of the work, and the tile at the property yards and hauled to the work by the contractor, the cost of hauling to be included in the price bid.

(2) For brick sidewalks the space over which the pavement is to be laid will be excavated to the depth of 10 inches below the top surface of the proposed pavement, when thoroughly compacted by rolling or ramming. Any objectionable or unsuitable material below the bed will be removed and the space filled with clean gravel or sand. Care must be taken in excavating to preserve the proper slope, parallel with the surface.

(3) Upon the foundation will be laid a bed of fine bank gravel, 4 inches in depth when compacted, screened from all pebbles measuring more than $1\frac{1}{2}$ inches in their largest dimensions, and thoroughly rolled or rammed. Upon this will be laid a bed of fine sharp sand, washed and dried, 4 inches in thickness, to serve as a bed for the blocks, which will be laid directly upon and embedded in it with close joints. Special care will be observed to make the surface of this bed of sand parallel to the surface of the pavement when finished. The bricks must be laid by the pavers standing or kneeling upon the bricks already laid, and not upon the bed of sand.

(4) For tile sidewalks the foundation will be prepared as for brick sidewalks, excepting that the sand on which the tiles are laid shall be 2 inches in thickness, as they do not admit of as heavy ramming as brick sidewalks, and the surface shall be covered with equal parts of fine dry sand and dry hydraulic cement, thoroughly swept into the joints and the surplus swept off.

(5) The bricks or tile are to be laid at right angles with the line of the street, or in herring-bone style, as may be directed by the Engineer Commissioner, and even with the top of the curb when rammed, each course to be of bricks of a uniform width and depth, and so laid that all longitudinal joints shall be broken by a lap of at least 2 inches. Each course will be driven against the course preceding it by a maul, to make tight joints. When thus laid the bricks will be immediately covered with clean, fine, dry sand, free from loam or earthy matter, and screened through a sieve or screen having not less than 20 meshes to the inch. The bricks will then be carefully rammed by placing a plank over several courses and ramming the plank with a heavy rammer. The ramming will be continued until the bricks reach a firm,

unyielding bed and present a uniform surface, with proper grade and slope. Any lack of uniformity in the surface must be corrected by taking up and relaying. When the ramming is complete a sufficient amount of fine, dry sand, as above described, will be spread over the surface and swept or raked into the joints.

(6) Rectangular spaces, 7 by 3 feet in dimension will be left unpaved around trees where already planted, and at intervals of 25 feet between centers adjacent to the curb on streets where trees have not been planted. When so ordered, a continuous tree-space 4 feet wide will be left unpaved adjacent to the curb.

(7) Edges of brick pavements, when not abutting against the curb, will be finished with a continuous row of brick on edge.

ASPHALT SIDEWALKS.

(1) The asphalt sidewalk will be 1 inch thick when compacted, with a base of hydraulic cement-concrete 3 inches in depth.

(2) The space over which the pavement is to be laid will be excavated to the depth of 4 inches below the surface of the proposed pavement, when thoroughly compacted by rolling or ramming. Any objectionable or unsuitable material below the bed will be removed and the space filled with clean gravel or sand. Care must be taken in excavating to preserve the proper slope parallel with the surface of the pavement.

(3) Upon this foundation will be laid a bed of hydraulic cement concrete 3 inches in thickness, to be made as follows: One measure of cement, which shall fulfill the current cement specifications of the District, and two of clean, sharp, washed sand, free from clay, will be thoroughly mixed, dry, and made into a mortar with the least possible amount of water; broken stone, not exceeding $1\frac{1}{2}$ inches in their largest dimensions, thoroughly cleaned from dust and dirt, drenched with water, but containing no loose water in the heap, will be incorporated immediately with the water in such quantities as will give a surplus of mortar when rammed. This proportion, when ascertained, will be regulated by measure. Each batch of concrete will be thoroughly mixed, the mixing being continued on the board until each piece of stone is completely coated with mortar; it will then be spread and at once thoroughly compacted by ramming until free mortar appears upon the surface. The whole operation of mixing and laying each batch will be performed as expeditiously as possible, with the use of a sufficient number of skilled men. The upper surface will be made exactly parallel with the surface of the pavement to be laid and will be protected from the action of the sun and wind until set.

(4) The wearing surface will be composed of the same material and manufactured in the same manner as that laid upon carriageways, and will be laid in the same manner, to have a thickness of 1 inch when compacted 40 per cent. The surface will be compacted by tamping-irons and hand-rollers. It will be finished by sweeping dry hydraulic cement over its surface and cross-rolling.

(5) Rectangular spaces, 7 by 3 feet in dimension, will be left unpaved around trees where already planted, and at intervals of 25 feet between centers, adjacent to curb, on streets where trees have not been planted. When so ordered, a continuous tree space 4 feet wide will be left unpaved adjacent to the curb.

(6) Where the pavement is next to the curb or wall, hot asphalt will be poured into the joints and the pavement will be coated 3 inches therefrom with hot asphalt and smoothed with hot smoothing-irons, in order to make the joints impervious. Where the pavement does not abut against a curb or wall, a strip of board 1 inch thick reaching to the bottom of the pavement will be used as a curb, made flush with the surface of the pavement.

ARTIFICIAL STONE SIDEWALK.

(1) The artificial stone sidewalk will be 1 inch thick, with a base of hydraulic cement concrete 3 inches in depth.

(2) The bed of the sidewalk beneath the base will be prepared in the same manner as for asphalt sidewalks.

(3) The base will be prepared in the same manner and with the same kind of material as that for asphalt sidewalks.

(4) Upon this base the bearing surface will be laid 1 inch in thickness; it will be composed of one part of Portland cement and one part of sand. The cement must be in accordance with the current District of Columbia specifications. The cement will be tested daily. The sand must be of such size as will pass a No. 20 screen, and must be sharp, silicious, and free from aluminous and all other foreign substances.

(5) The matrix of the wearing surface will be made as follows: The cement and sand will be thoroughly mixed, dry, and a sufficient quantity of water afterwards added to form a paste of proper consistency; it will be expeditiously mixed by skilled men; none of it will be used after it has been mixed one-half hour, or evidence of setting are apparent.

(6) The water used must be fresh and clean.

(7) The wearing surface will be laid upon the base of 1 inch in thickness, with a

uniform plane surface properly smoothed. It will be cut into diamonds or diagonal slabs of such size as shall be directed.

(8) The wearing surface will be protected from the action of the sun and rain until it is thoroughly set.

(9) Rectangular spaces 7 by 3 feet in dimensions will be left unpaved around trees, where already planted, and at intervals of 25 feet between centers, adjacent to the curb, on streets where trees have not been planted. When so ordered a continuous tree space 4 feet wide will be left unpaved adjacent to the curb.

(10) Where the pavement does not abut against a curb or a wall a strip of board 1 inch thick, reaching to the bottom of the pavement, will be used as a curb, made flush with the surface of the pavement.

SPECIFICATIONS FOR ARTIFICIAL BLOCK SIDEWALKS.

The contractor shall remove all stone, plank, bricks, or other materials of value from points where the sidewalks are to be laid as the work progresses, and shall haul them to the nearest property yard or otherwise dispose of them as the Engineer Commissioner may direct. Care shall be taken at all times not to interfere with business or travel more than is absolutely necessary for the faithful performance of the work. No more than 100 feet shall be closed to travel at any one time, nor remain closed for a longer time than three days, and free ingress and egress from the streets to all stores and hallways shall be provided for at all times; and during the time that travel is closed at any point the contractor shall provide a temporary walk, said walk to be at all times in condition perfectly safe for pedestrians and easy of access from adjoining walks.

The contractor shall make such cutting and filling as may be necessary to bring the foundation to the subgrade, 6 inches below the established grade of the sidewalk.

Whenever the Engineer Commissioner or inspector may deem it necessary the foundation shall be consolidated by wetting, rolling, or ramming to give it proper stability. Upon the foundation thus prepared there shall first be laid 3 inches of concrete, composed of one part natural hydraulic cement, two and one-half parts sand, and five parts broken stone, which shall be rammed in place to the satisfaction of the Engineer Commissioner. On this concrete bed shall be laid three-quarters of an inch of mortar, composed of four measures of clean, sharp sand and one of Portland cement, which shall be put in as dry as possible and rammed in place with an iron rammer weighing at least 25 pounds. Upon the foundation thus prepared shall be laid square blocks or tiles $2\frac{1}{4}$ inches thick, measuring 18 inches on a side. They shall be laid so as to present a true surface on top and conform to the exact grade of the sidewalk. A thin grouting of pure Portland cement of the best quality shall be spread over the surface and carefully swept into the joints. All superfluous groutings shall be cleaned off, and the walk shall be protected with plank or otherwise until the cement has thoroughly set.

Driveways shall be laid with granite or asphalt blocks as may be directed by the Engineer Commissioner.

The tiles shall be $2\frac{1}{4}$ inches thick. The lower $1\frac{1}{4}$ inches to be composed of one part Portland cement (equal to that specified in current District of Columbia specifications) and two parts of clean, sharp sand, thoroughly mixed, using as small a quantity of water as possible, and carefully rammed into the molds. The upper one-half inch and the sides for one-half inch shall be composed of one part Portland cement, of same quality as above, and one part of clean, sharp sand.

The surface shall be finished smooth, but not polished.

The tiles, when being seasoned, shall be kept wet for the first five days. No tiles shall be used on the work unless guaranteed by the contractor to be at least thirty days old.

Unless otherwise ordered, the edge of the sidewalk shall be finished with plastering of Portland cement and sand of equal parts.

The blocks will be laid with their edges perpendicular to or parallel with the line of the street, as may be ordered by the Engineer Commissioner.

Cement inspection.—No cement shall be used on this work unless approved by the Engineer Commissioner. For this purpose he shall be entitled to take one-half pound from each package. The decision of the Engineer Commissioner shall be final in all cases, and no cement condemned by him shall be used on the work for any purpose whatever. All cement will be required to pass the tests specified in current District of Columbia specifications.

SPECIFICATIONS FOR LAYING STREET PAVEMENTS.

STANDARD ASPHALT PAVEMENT.

The attention of bidders is invited to the clause of the appropriation bill which says:

"That under appropriations contained in this act no contract shall be made for

making or repairing concrete or asphalt pavement at a higher price than \$2.25 per square yard for a pavement with hydraulic base and \$2 per square yard for a quality equal to the best laid in the District prior to July 1, 1886, and with same depth of base."

(1) Standard asphalt pavement will be $2\frac{1}{2}$ inches in thickness when compacted, with a base of hydraulic cement concrete 6 inches in depth.

(2) The space over which the pavement is to be laid will be excavated to the depth of $8\frac{1}{2}$ inches below the top surface of the pavement when completed. Any objectionable or unsuitable material below the bed will be removed, and the space filled with clean gravel or sand well rammed. The bed will then be trimmed so as to be parallel to the surface of the pavement when completed, and the entire roadbed will be thoroughly rolled with a heavy steam roller.

Upon this foundation will be laid a bed of hydraulic cement concrete 6 inches in thickness, to be made as follows:

One measure of hydraulic cement and two of clean, sharp, washed sand, free from clay, will be thoroughly mixed dry and made into a mortar with the least possible amount of water; broken stone of acceptable dimensions and character, thoroughly cleaned from dust and dirt, drenched with water, but containing no loose water in the heap, will be incorporated immediately with the mortar in such quantities as will give a surplus of mortar when rammed. This proportion, when ascertained, will be regulated by measure. Each batch of concrete will be thoroughly mixed, the mixing being continued on the board until each piece of stone or brick is completely coated with mortar; it will then be spread, and at once thoroughly compacted by ramming until free mortar appears upon the surface. The whole operation of mixing and laying each batch will be performed as expeditiously as possible, with the use of a sufficient number of skilled men. No gravel will be used in the concrete, but only angular fragments of stone having rough faces obtained by fracture, and measuring not more than $1\frac{1}{2}$ inches in their largest dimensions. The upper surface of the base will be made parallel with the crown of the pavement to be laid, and will be suitably protected from the action of the sun and wind until set.

The cement used must conform to the current District of Columbia specifications, and shall in no case be used until sufficient tests have been made to prove this. A sample sufficient for test shall be furnished from each barrel.

(3) The wearing surface will be composed of—

- (1) Refined Trinidad or other acceptable asphaltum.
- (2) Heavy petroleum residuum oil.
- (3) Fine sand, containing not more than 5 per centum of loam or clay.
- (4) Fine stone dust.
- (5) Fine powder of carbonate of lime.

(4) The asphaltum must be refined under the direction and to the satisfaction of the Engineer Commissioner. The asphaltum must not be inferior in any respect to the best in use during the past year in the District, as shown by its chemical composition and physical characteristics. Should the contractor desire to use any asphalt different from that now being used, he shall demonstrate to the satisfaction of the Engineer Commissioner that it is as good, or better.

(5) The residuum oil must be free from coke or excess of light oil or hard paraffine, and of a specific gravity of from 18 to 22 degrees Baumé, and withstand a fire test of 250 degrees F.

(6) The refined asphaltum and residuum oil will be mixed in the following proportions by weight with Trinidad asphalt:

	Parts.
Asphalt.....	100
Petroleum.....	from 17 to 20

Samples of asphalt cement shall be furnished daily to the inspector of asphalt and cements, in suitable tin boxes, from the dipping kettles and from the oiling stills.

(7) The proportion of mixture for other asphalts will be determined by their chemical composition.

(8) The asphaltic cement, made in the manner above described, will be mixed with other materials in the following proportions by weight, viz:

Asphaltic cement.....	from 13 to 16
Sand.....	from 63 to 58
Stone dust.....	from 28 to 23
Pulverized carbonate of lime.....	from 3 to 5

(9) The proportion of materials used will depend upon their character and the traffic on the street, and will be determined by the engineer commissioner, but the percentage of bitumen in any mixture soluble in carbon bisulphide shall not exceed the limits, 9 to 11 per cent. If the proportions of the mixture are varied in any manner from those specified the mixture will be condemned; its use will not be permitted;

and, if already placed on the street, it will be removed and replaced by proper material at the expense of the contractor.

(10) The mixture of sand and stone dust and the asphaltic cement will be heated separately to about 300° F. The pulverized carbonate of lime, while cold, will be mixed with the hot sand in the required proportions, and then mixed with the asphaltic cement, at the required temperature and in the proper proportion, in a suitable apparatus, so as to effect a thoroughly homogeneous mixture. Sand boxes and tar and asphalt gauges will be weighed in presence of inspectors as often as may be desired.

(11) The pavement mixture prepared in a manner thus indicated will be laid on the foundation in two coats. The first coat, called cushion coat, will contain from 1 to 2 per cent more asphaltic cement than given above; it will be laid to such depth as will give a thickness of 1 inch after being consolidated by a roller. The second coat, called surface coat, prepared as above specified, will be laid on the cushion coat; it will be brought to the ground in carts, at a temperature of not less than 250° F., and if the temperature of the air is less than 50° the contractor must provide canvas covers for use in transit. It will then be carefully spread, by means of hot iron rakes, in such manner as to give uniform and regular grade, and to such depth that, after having received its ultimate compression of two-fifths, it will have a net thickness of 2 inches. This depth will be constantly tested by means of gauges furnished by the Engineer Commissioner. The surface will then be compressed by hand rollers, after which a small amount of hydraulic cement will be swept over it, and it will then be thoroughly compressed by a steam roller weighing not less than 250 pounds to the inch run, the rolling being continued for not less than 5 hours for every 1,000 yards of surface.

(12) All materials used, as well as the plant and methods of manufacture, will be subject to the inspection and approval of the Engineer Commissioner.

(3) The degree of fineness, both of sand, stonedust, and powdered limestone, will be determined by testing with screens, as follows: The powdered carbonate of lime will be of such degree of fineness that 16 per cent by weight shall be an impalpable powder of limestone, and the whole of it shall pass a No. 26 screen. The sand will be of such size that not more than 50 per cent of it will pass a No. 80 screen. The broken stone or stonedust shall be the residue from the crushing of stone from the base and binder which passes a sieve of not more than six meshes to the inch.

(14) Gutters, wherever directed, will be granite block or brick of such width as may be directed, laid upon a hydraulic base of not less than 4 inches in thickness, in accordance to specifications for granite-block pavement.

(15) Where gutters are not paved with granite blocks or bricks they will, for a width of 1 foot, be painted with No. 4 paving tar and ironed with hot smoothing irons.

(16) After the curb is set and pavement laid hot paving tar will be poured into the joints of the curb till it rises and remains at the level of the pavement.

COAL-TAR DISTILLATE PAVEMENT.

(1) Coal-tar distillate pavement will consist of a base and binder of 4½ inches in depth when compacted, and a wearing surface of 1½ inches in thickness when compacted.

(2) The space over which the pavement is to be laid will be excavated to the depth of 6 inches below the top of the surface of the pavement when completed. Any objectionable or unsuitable material below the bed must be removed and the space filled with clean gravel or sand well rammed. The bed will then be trimmed so as to be exactly parallel to the surface of the new pavement when completed, and the entire roadbed will be thoroughly rolled with heavy steam roller.

Upon this foundation will be laid the base and binder, 4½ inches in thickness, in the following manner:

(3) *Base.*—The base will be composed of clean broken stone that will pass through a 3-inch ring, well rammed and rolled with a steam roller to a depth of 4 inches, and thoroughly coated with No. 4½ coal-tar paving cement, or its equivalent asphalt cement, as herein specified, in the proportion of about one gallon to the square yard of base.

(4) *Binder.*—The second or binder course will be composed of clean broken stone, thoroughly screened, not exceeding 1½ inches in the largest dimensions, and No. 4 coal-tar paving cement, or its equivalent asphalt cement. The stone will be heated to a temperature between 230° and 250° F. by passing through revolving heaters and thoroughly mixed by machinery, with the paving cement in about the proportion of one gallon of No. 4 tar to one cubic foot of stone. It will be hauled upon the work, spread upon the base course at least 2 inches thick, and immediately rammed and rolled with hand and steam rollers while in a hot, plastic condition.

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(5) *Wearing surface.*—The wearing surface will be composed of the following materials, and in the following proportions:

	Per cent.
Clean sharp sand.....	63 to 58
Broken stone or rock dust	28 to 23
Paving cement	13 to 15
Hydraulic cement	.9
Slaked lime	.15
Flower of sulphur.....	.1

(6) The sand shall be clean, sharp river sand, free from clay, and of such size that not more than 20 per cent shall be retained upon a sieve of 20 meshes to the inch, and not more than 5 per cent shall pass a sieve of 70 meshes to the inch, about 60 per cent to be coarser than 40 meshes to the inch.

(7) The broken stone or stone dust shall be the residue from the crushing of stone from the base and binder which passes a sieve of not more than 6 meshes to the inch.

(8) The paving cement shall be composed of—

Refined Trinidad asphalt, twenty-five to thirty parts; No. 4 coal-tar paving cement, seventy-five to seventy parts. The refined asphalt must be equal in all respects to that prescribed for standard asphalt pavement.

The No. 4 coal-tar paving cement must be free from excess of sooty matter, naphthaline and creosote oils, as determined by the inspector of asphalt and cements, and have such consistency or penetration as the Engineer Commissioner may prescribe.

(9) The hydraulic cement, lime, and sulphur must be of the best commercial quality.

(10) The materials for the wearing surface will be heated to not over 260° F., the paving cement in kettles, the sand and stone dust in revolving heaters. To the latter the hydraulic cement, lime, and sulphur will be added cold in the sand box before going to the mixer.

They will be thoroughly mixed by approved machinery, and the mixture carried upon the work, where it will be spread upon the binder course 2 inches thick with hot iron rakes and other suitable appliances, and immediately compacted with hot tamping irons and hand and steam rollers while in a hot and plastic state. In spreading the material the joints are to be diagonal to the line of the street, or at right angles, as may be ordered. The surface will be finished with a dusting of dry hydraulic cement rolled in. In cool weather, or when ordered, the carts carrying the mixture are to be protected with canvas covers.

(11) The pavement so constructed must be a solid mass 6 inches thick, and must be thoroughly rolled and cross-rolled until it has become hard and solid. It must be equal in every respect to the best pavement of this class which has been heretofore laid.

(12) The relative proportions of the component materials will be changed upon the order of the Engineer Commissioner, as occasion shall require.

(13) All materials used, as well as the plant and methods of manufacture, will be subject to the inspection and approval of the Engineer Commissioner.

(14) The degree of fineness, both of sand, stone dust, and powdered limestone will be determined by testing with screens, as follows: The powdered carbonate of lime will be of such degree of fineness that 16 per cent of weight shall be an impalpable powder of limestone, and the whole of it shall pass a No. 26 screen. The sand will be of such size that no more than 50 per cent of it will pass a No. 50 screen. The broken stone or stone dust shall be the residue from the crushing of stone from the base and binder which passes a sieve of not more than 6 meshes to the inch.

(15) Gutters, wherever directed, will be granite block or brick of such width as may be directed, laid upon a hydraulic base of not less than 4 inches in thickness, in accordance to specifications for granite block pavement or brick gutters.

COMBINATION ASPHALT PAVEMENT ON BITUMINOUS BASE.

(1) Combination asphalt pavement on bituminous base will consist of a base 4 inches, a binder of 1½ inches, and a wearing surface 1½ inches in thickness, when compacted.

(2) The space over which the pavement is to be laid will be excavated to the depth of 7 inches below the top of the surface of the pavement when completed. Any objectionable or unsuitable material below the bed must be removed and the space filled with clean gravel or sand well rammed. The bed will then be trimmed so as to be exactly parallel to the surface of the new pavement when completed, and the entire roadbed will be thoroughly rolled with a heavy steam roller weighing not less than 5 tons.

Upon this foundation will be laid the base and binder $5\frac{1}{2}$ inches in thickness, in the following manner:

(3) *Base*.—The base will be composed of clean broken stone that will pass through a 3-inch ring, well rammed and rolled with a steam roller weighing not less than 5 tons to a depth of 4 inches. The rolling will be continued until the stone ceases to creep before the roller and until it is evident the final compression has been reached. It will then be thoroughly coated with No. 4 coal-tar paving cement or its equivalent asphalt cement in the proportion of about 1 gallon to the square yard of base.

(4) *Binder*.—The second or binder course will be composed of clean broken stone, thoroughly screened, not exceeding 1 inch in the largest dimension, and No. 4 coal-tar paving cement or its equivalent asphalt cement. The stone will be heated to a temperature between 230 and 250° F. by passing through revolving heaters and thoroughly mixed by machinery with the paving cement in about the proportion of 1 gallon of the latter to 1 cubic foot of stone. It will be hauled upon the work, spread upon the base course to such thickness that when compacted it will be $1\frac{1}{2}$ inches thick, and immediately rammed and rolled with hand and steam rollers while in a hot, plastic condition.

(5) *Wearing surface*.—The wearing surface will be $1\frac{1}{2}$ inches thick when compacted, and will conform in all other respects to the wearing surfaces as prescribed for the standard asphalt pavement, as described in these specifications.

(6) The pavement so constructed must be a solid mass 7 inches thick, and must be thoroughly rolled and cross-rolled until it has become hard and solid. It must be equal in every respect to the best pavement of this class which has been heretofore laid.

(7) Gutters, wherever directed, will be granite block or brick of such width as may be directed, laid upon a hydraulic base of not less than 4 inches in thickness, in accordance to specifications for granite block pavement and for brick gutters herein.

COMBINATION ASPHALT PAVEMENT ON HYDRAULIC BASE.

The combination asphalt basement on hydraulic base will be 9 inches in thickness, consisting of a base composed of 6 inches of hydraulic concrete and 2 inches of binder, $1\frac{1}{2}$ inches when compacted, and a wearing surface of standard asphalt $2\frac{1}{2}$ inches in thickness, or $1\frac{1}{2}$ inches when compacted.

(2) The space over which the pavement is to be laid will be excavated to the depth of 9 inches below the top surface of the pavement when completed. Any objectionable or unsuitable matter below the bed will be removed, and the space filled with clean gravel or sand well rammed. The bed will then be trimmed so as to be parallel to the surface of the pavement when completed, and the entire roadbed will be thoroughly rolled with a heavy steam roller.

Upon the bed thus prepared the pavement will be laid as follows:

(3) *Hydraulic base*.—This will be laid 6 inches in thickness, conforming in all other respects to the hydraulic base prescribed for the standard asphalt pavement as described in these specifications.

(4) *Binder course*.—This binder course will conform in all respects to the binder course prescribed for the combination asphalt pavement on bituminous base, as described in these specifications, and will be $1\frac{1}{2}$ inches in thickness when compacted.

(5) *Wearing surface*.—The wearing surface will be $1\frac{1}{2}$ inches thick when compacted, and will conform in all other respects to the wearing surfaces as prescribed for the standard asphalt pavement, as described in these specifications.

NEW COMBINATION ASPHALT PAVEMENT ON BITUMINOUS BASE.

The new combination asphalt pavement on bituminous base will be 6 inches in thickness, consisting of a base of broken stone 4 inches thick laid in coal-tar paving cement, a binder course 2 inches thick, $1\frac{1}{2}$ inches thick when compacted, the base and binder to be $4\frac{1}{2}$ inches thick when compacted, and a wearing surface of standard asphalt $1\frac{1}{2}$ inches thick when compacted.

(2) The space over which the pavement is to be laid will be excavated to the depth of 7 inches below the top surface of the pavement when completed. Any objectionable or unsuitable matter below the bed will be removed and the space filled with clean gravel or sand well rammed. The bed will then be trimmed so as to be parallel to the surface of the pavement when completed, and the entire roadbed will be thoroughly rolled with a heavy steam roller.

Upon the bed thus prepared the pavement will be laid as follows:

(3) *Bituminous base*.—This course will be laid 4 inches in thickness, conforming in all respects to the base course prescribed for the coal-tar pavement as described in these specifications.

(4) *Binder course*.—This binder course will conform in all respects to the binder

course prescribed for the coal-tar pavement as described in these specifications, and will be $1\frac{1}{4}$ inches in thickness when compacted.

(5) *Wearing surface.*—The wearing surface will be $1\frac{1}{4}$ inches thick when compacted, and will conform in all other respects to the wearing surfaces as prescribed for the standard asphalt pavement as described in these specifications.

SPECIAL SPECIFICATIONS FOR STREETS PAVED WITH COBBLE AND RUBBLE STONE.

These streets are now paved with cobble and rubble, and the new pavement will be laid upon this old pavement as a base. The street will be carefully gone over and all loose earth and other material of like nature removed. Stones which project too much will be rammed down, and where holes exist they will be repaired in a manner to make the base solid and firm. The gutter flags will be removed and sufficient earth excavated to permit of the emplacement of the regular bituminous base, as prescribed for asphalt pavements on bituminous base. This bituminous base will then be put in.

The whole area between the curbs will then be covered with a coat of binder (as prescribed for asphalt pavement on bituminous base), which will be carefully rammed into all interstices, and will be of such thickness that it will, when thoroughly compacted, be at least one-half inch above the most projecting stones. This will be thoroughly and carefully rolled to a smooth and even surface.

Upon this will be laid a wearing surface coat of asphalt composition conforming in all respects to that prescribed for the wearing surface coat of the asphalt pavements on bituminous base.

The price named for the pavement will include everything done on the street, except work in connection with setting or resetting curb and laying sidewalks.

SPECIFICATIONS FOR LAYING GRANITE BLOCK PAVEMENT.

(1) The granite block pavement will be laid on a foundation of gravel and sand, with filling of hot paving cement.

(2) The granite blocks will be furnished by the District at the property yards, or at streets or reservation where they may be stored.

(3) The space over which the pavement is to be laid will be excavated to the depth of $12\frac{1}{4}$ inches below the surface of the proposed pavement when completed. Any objectionable or unsuitable material below the bed will be removed and the space filled with clean gravel or sand. Care must be taken in excavating to preserve the proper crown. All holes and inequalities to be filled with sand or gravel, and such filling to be thoroughly compacted by rolling or ramming.

(4) Upon this foundation is to be laid a bed of fine bank gravel, 4 inches in depth, when compressed, screened from all pebbles measuring more than $1\frac{1}{4}$ inches in their largest dimensions, and thoroughly rammed. Upon this will be laid a bed of fine, sharp sand washed and dried, 3 inches in thickness, to serve as a bed for the blocks, which will be laid directly upon and imbedded in it, with close joints. The stone blocks are to be laid at right angles with the line of the street; each course to be of blocks of a uniform width and depth, and so laid that all longitudinal joints shall be broken by a lap of at least 2 inches. When thus laid, the blocks will be immediately covered with clean, fine, hot, dry gravel, in proper quantities, raked until all the joints become filled therewith, and the blocks will then be carefully rammed to a firm, unyielding bed, with uniform surface and with proper grade. There will then be poured into the joints, at a temperature of 300° F., paving cement of proper consistency, to be obtained by the direct distillation of coal tar. The cement required is that ordinarily numbered 6 at the manufactory. It will be poured into the joints of the pavement until the sand beneath and the gravel between the blocks will absorb no more and the joints are filled flush with the upper surface of the pavement. Dry, hot gravel not larger than three-fourths of an inch in any dimension will then be poured along the joints, and will be consolidated by tapping with a light rammer. Any wastage of paving cement by pouring over the surface of the pavement instead of between the blocks must be covered with a sufficient quantity of fine, dry gravel to absorb it.

SPECIAL PAVEMENTS.

Bidders are at liberty to submit for consideration proposals and specifications for any special or patented pavement which may be deemed suitable for roadways, furnishing in each case all necessary particulars and accurate statements of components and method of manufacture.

SPECIFICATIONS FOR ASPHALT BLOCK PAVEMENT.

(1) The size of the blocks will be 4 by 5 by 12 inches, and a variation of one-fourth of an inch from these dimensions will be sufficient grounds for rejecting any block.

(2) The blocks will be composed of—

Paving cement.....	8 to 12
Crushed limestone	92 to 88

The paving cement shall be of a quality in character equivalent to that prescribed for standard asphalt pavements. The petroleum must be freed from all impurities and brought to a specific gravity of from 18 degrees to 22 degrees Beaumé, and a fire test of 250° F. The right is reserved to inspect the manufacture of the blocks and the preparation of the cement at any time.

All bids must be accompanied by a specimen block of the size and quality described in these specifications, labeled with the name of the bidder and the locality of the factory; bids not accompanied by specimen blocks will not be accepted. The blocks will be tested by such method as the Engineer Commissioner may prescribe, and all blocks furnished will be subject to test and approval.

(3) The space over which the pavement is to be laid will be excavated to the depth of 12 inches below the top line of the proposed pavement, when fully rammed. Any objectionable or unsuitable material below the bed will be removed, and the space filled with clean gravel or sand. Care must be taken in excavating to preserve the proper crown. All holes and inequalities will be filled with sand or gravel, such filling to be thoroughly compacted by rolling or ramming.

(4) Upon this foundation, as above, is to be laid a bed of fine bank gravel, to be screened from all pebbles measuring more than 1½ inches in their largest dimensions, 5 inches thick when compacted by rolling and ramming. Upon this will be laid a bed of fine, sharp sand, washed and dried, 2 inches in thickness, to serve as a bed for the blocks, which will be laid directly upon and imbedded in it with close joints. Special care will be observed to make the surface of this bed of sand exactly parallel to the surface of the pavement when complete. The blocks must be laid by the pavers standing or kneeling upon the blocks already laid, and not upon the bed of sand.

(5) The blocks are to be laid diagonally with the line of the street or at right angles, and with such crown as the Engineer Commissioner may direct; each course to be of blocks of an uniform width and depth, and so laid that all longitudinal joints shall be broken by a lap of at least 4 inches. Each course of blocks will be driven against the course preceding it by a heavy maul in order to make the lateral joints as tight as possible, and the longitudinal joints will be closed by pressing each course in the direction of its length by a lever. When thus laid the blocks will be immediately covered with clean, fine sand, entirely free from any loam or earthy matter, perfectly dry, and screened through a sieve or screen having not less than twenty meshes to the inch. The blocks will then be carefully rammed by placing a plank over several courses and ramming the plank with a heavy rammer. The ramming will be continued until the blocks reach a firm, unyielding bed and present a uniform surface, with proper grade and crown. Any lack of uniformity in the surface must be corrected by taking up and relaying the blocks. When the ramming is complete a sufficient amount of fine, dry sand, as above described, will be spread over the surface, and swept or raked into the joints.

SPECIFICATIONS FOR RESURFACING CONCRETE PAVEMENTS.

(1) The work to be done under this contract includes the resurfacing of all concrete pavements where necessary during the fiscal year ending June 30, 1888. The concrete pavements are of two general classes, viz: those composed of an asphalt cement, on a base of hydraulic cement-concrete, and those composed of coal-tar distillate and asphalt cement on a bituminous binder and base of broken stone. The pavements are to be resurfaced with such materials as may be directed. The total amount of work is approximately as follows:

Base of broken stones	cubic yards..	100
Bituminous binder.....	do.....	200
Base of hydraulic-cement concrete	do.....	50
Coal-tar distillate surface.....	square yards..	20,000
Asphalt surface.....	do.....	20,000
Laying granite-block pavement.....	do.....	500
Cutting out and removing old concrete pavement.....	do.....	1,000

(2) Streets and avenues to be resurfaced will be designated by the Engineer Commissioner, and the work will be done at such times as may be ordered.

LAYING GRANITE BLOCKS ADJACENT TO RAILWAY TRACKS.

(1) When the pavement is laid adjacent to the tracks of a street railroad, one row of *selected* granite paving blocks will be laid next to the track, alternating as headers and stretchers tooting into the pavement. The blocks will be furnished by the District at the property yards or District reservations, and must be hauled to the street at the contractor's expense.

(2) The foundation will extend to the depth of the bottom of the cross-ties, and will be similar in all respects to the foundation of the adjacent carriageway pavement, except as to thickness of base.

(3) If the foundation consists of bituminous concrete, the blocks will be laid directly upon and embedded in the binder while it is still in a hot and plastic condition.

(4) If the foundation consists of hydraulic-cement concrete, the base will be covered with a layer of fine sharp sand, washed and dried, 2 inches in thickness, and the blocks will be laid directly upon and embedded in this sand, with close joints.

(5) The top of the blocks will be even with the surface of the tread of the rail, which shall conform with the grade of the street.

(6) The blocks will be laid before the wearing surface is laid upon the carriageway, and carefully rammed to a firm bed. Care will be taken to fit them well up against the stringers of the railroad.

(7) The space back of the blocks will be filled to the surface of the base for the carriageway pavement, with the same material as is used for said base well rammed.

(8) Immediately after the wearing surface shall have been laid, clean, fine, hot gravel, not larger than three-fourths of an inch in any dimensions, will be poured into the joints of the blocks until they become nearly filled.

(9) There will then be poured into the joints, at a temperature of 300° Fahrenheit, paving cement made of No. 6 coal-tar distillate, until the joints are completely filled flush with the surface of the pavement. Additional fine, hot gravel will then be poured along the joints, and will be consolidated by tapping with a light rammer. If found necessary, additional paving cement will be poured between the blocks until the joints are thoroughly filled.

(10) In measuring this work for payment, when standard-sized granite blocks are used, the area included between the outer edge of the rail and a line parallel to and six inches from rail will be taken as the area of granite-block pavement laid. Bids will be based on this rule.

(11) When so ordered, the block pavement will be extended to cover the entire area included between the rail and a line parallel to and two feet distant from said rail.

The setting and resetting of curbs, the laying and relaying of brick sidewalks, and the laying of granite-block pavements will be done in accordance with specifications on file in the engineer department governing the several classes of such work.

STANDARD ASPHALT CONCRETE PAVEMENT.

(1) For the resurfacing of these pavements the following specifications will be followed. The *base* (when required) will be laid as follows:

(2) One measure of cement equal to the best quality of fresh-burned hydraulic American cement, and two of clean, sharp, washed sand, free from clay, will be thoroughly mixed dry, and made into a mortar with the least possible amount of water; broken stone or hard brick of acceptable dimensions and character, thoroughly cleaned from dust and dirt, drenched with water, but containing no loose water in the heap, will then be incorporated immediately with the mortar in such quantities as will give a surplus of mortar when rammed. This proportion, when ascertained, will be regulated by measure. Each batch of concrete will be thoroughly mixed, the mixing being continued on the board until each piece of stone or brick is completely coated with mortar; it will then be spread and at once thoroughly compacted by ramming until free mortar appears upon the surface. The whole operation of mixing and laying each batch will be performed as expeditiously as possible, with the use of a sufficient number of skilled men. No gravel will be used in the concrete, but only angular fragments of stone or brick, having rough faces obtained by fracture, and measuring not more than one and a half inches in their largest dimensions. The upper surface of the base will be made parallel with the crown of the pavement to be laid, and will be suitably protected from the action of the sun and wind until set.

(3) The wearing surface will be composed of—

(1) Refined Trinidad or other acceptable asphaltum.

(2) Heavy petroleum.

(3) Fine sand, containing not more than 5 per centum of hydrosilicate of alumina.

(4) Fine powder of carbonate of lime.

(4) The asphaltum must be refined and brought to a uniform standard of purity and gravity.

(5) The petroleum must be freed from all impurities and brought to a specific gravity of from 18° to 22° Beaumé and a fire test of 250° F.

(6) They will be mixed in the following proportions by weight:

With Trinidad asphalt—

	Parts.
Asphalt	100
Petroleum	from 14 to 17

(7) The proportion of mixture for other asphalts will be determined by their chemical composition.

(8) The asphaltic cement made in the manner above described will be mixed with other materials in the following proportions by weights, viz:

Asphaltic cement	from 15 to 18
Sand	from 70 to 65
Pulverized carbonate of lime	from 15 to 17

(9) The proportion of materials used will depend upon their character and the traffic on the street, and will be determined by the Engineer Commissioner. If the proportions of the mixture are varied in any manner from those specified the mixture will be condemned. Its use will not be permitted, and, if already placed on the street, it will be removed and replaced by proper material at the expense of the contractor.

(10) The sand and asphaltic cement will be heated separately to about three hundred degrees Fahrenheit. The pulverized carbonate of lime, while cold, will be mixed with the hot sand in the required proportions, and then mixed with the asphaltic cement at the required temperature and in the proper proportion in a suitable apparatus, so as to effect a thoroughly homogeneous mixture.

(11) The pavement mixture, prepared in the manner thus indicated, will be laid on the foundation as follows: It will be brought to the ground in carts, at a temperature of about 250° F., and carefully spread, by means of hot, iron rakes, in such manner as to give a uniform and regular surface, and to a depth of 4.16 inches, so as (after having received its ultimate compression of 40 per cent.) to have a thickness of 2½ inches. This depth will be tested by means of gauges furnished by the Engineer Commissioners. The surface will then be compacted by tamping irons and hand rollers, after which a small amount of dry hydraulic cement will be swept over it, and it will then be thoroughly compacted by a steam-roller weighing not less than 250 pounds to the inch-run, the rolling being continued for not less than five hours for every 1,000 yards of surface.

(12) All materials used, as well as the plant and methods of manufacture, will be subject to inspection and approval.

(13) The degree of fineness, both of sand and powdered limestone, will be determined by testing with screens, as follows: The powdered carbonate of lime will be of such degree of fineness that 16 per centum by weight of the entire mixture for the pavement shall be an impalpable powder of limestone, and the whole of it shall pass a No. 26 screen. The sand will be of such size that none of it will pass a No. 80 screen, and the whole of it shall pass a No. 20 screen.

(14) In order to make the gutters, which are but little compacted by traffic, impervious to water, a width of 12 inches next the curb will be coated with hot pure asphalt and smoothed with hot smoothing-irons, in order to charge the pavement with an excess of asphalt.

(15) The pavement as laid or resurfaced under these specifications must be in no respect inferior to the best of those now in service.

COAL-TAR DISTILLATE AND ASPHALT PAVEMENT.

(1) For the resurfacing of these pavements, the following specifications will be followed.

(2) The "base," when required, will be composed of clean, broken stone, that will pass through a 3-inch ring, well rammed and rolled to a depth of 4 inches, and thoroughly coated with hot paving cement composed of No. 4 coal-tar distillate in the proportion of about 1 gallon to the square yard of pavement.

(3) The second or "binder" course will be composed of clean, broken stone, thoroughly screened, not exceeding 1½ inches in the largest dimensions, and No. 4 coal-tar distillate. The stone will be heated by passing through revolving heaters, and thoroughly mixed by machinery with the distillate in the proportion of one gallon of distillate to one cubic foot of stone.

(4) The binder will be hauled to the work, spread upon the base course at least 2 inches thick, and immediately rolled and rammed while in a hot and plastic condition.

(5) The wearing surface will be $1\frac{1}{2}$ inches thick when compacted, made of "paving cement" composed of 25 per cent of asphalt and 75 per cent of coal-tar distillate, mixed with other materials as follows: Clean, sharp sand will be mixed with pulverized stone, which must be of dimensions to pass through a $\frac{1}{4}$ -inch screen, in the proportion of two to one. To 21 cubic feet of the above-named mixture will be added one peck of dry hydraulic cement, four quarts flour of sulphur, and two quarts of air-slaked lime. To the above-mentioned mixture will be added 320 pounds of paving cement to compose the wearing surface.

(6) The material will be heated to about 250° F., the paving cement in kettles, the sand, stone, etc., in revolving heaters. They will be thoroughly mixed by approved machinery, and the mixture carried upon the work where it will be spread upon the binder course 2 inches thick with hot iron rakes and other suitable appliances, and immediately compacted with tamping irons, hand and steam rollers in its hot and plastic state. The surface will be finished with a dusting of dry hydraulic cement rolled in.

(7) The pavement so constructed must be a solid mass 6 inches thick, and will be thoroughly rolled and cross rolled until it has become hard and solid.

(8) The relative proportions of the component materials will be changed upon the order of the Engineer Commissioner, as occasion shall require. The pavement must be equal in every respect to that laid on K street, between Ninth and Eighteenth streets NW.

GUARANTY.

All work of surfacing will be guaranteed and kept in repair by the contractor for a period of five years from June 30, 1888. Ten per cent of the cost of this work (including the cost of granite blocks furnished by the District) will be retained and disposed of as otherwise provided for herein.

It is hereby expressly understood and agreed that the retain fund shall be subject to the control of the Commissioners of the District of Columbia for the purpose of maintaining the work in repair for the period specified, and the Commissioners, at their discretion, may require of the contractor and his sureties that any portion of said retain fund which may have been expended for the maintenance of the work, shall be made good by further deposit.

SPECIFICATIONS FOR REPAIRS TO CONCRETE PAVEMENTS.

(1) The work to be done under this contract includes the repairing of all concrete pavements where necessary, the repairs of cuts made for tapping sewers and pipes, and generally all patching and miscellaneous work necessary to keep the concrete pavements in good condition for travel during the fiscal year ending June 30, 1888. The pavements are to be repaired with such material as may be directed.

(2) The repairs will be made at such times and places and in such manner as shall be directed.

(3) The holes cut out will be cleaned and painted with hot paving cement, composed as follows:

For asphalt pavements: pure asphalt, ten parts; heavy petroleum, one part.

For coal tar distillate pavements: pure asphalt, 1 part; coal tar distillate No. 4, four parts.

In repairing plumbers' cuts the earth will be excavated to the depth of not less than 12 inches below the lower surface of the base of the pavement, and replaced with good gravel or old concrete laid in two layers. Each layer will be thoroughly rammed so as to afford a firm foundation for the base of the pavement. In case this foundation should settle so as to cause a depression in the pavement at any time during the term of the contract, the contractor will be required to take up the pavement and relay it properly at his own expense.

Repairs to the standard asphalt-concrete pavements and to the coal-tar distillate and asphalt pavements will be governed by the foregoing specifications for resurfacing such pavements.

FRENCH MASTIC PAVEMENTS.

For the repairs of sidewalks laid with French mastic, the holes will be cleaned out and the edges cut square. The base will be filled, if necessary, to within five-eighths of an inch of the surface with a concrete of hydraulic cement and small pebbles mixed in the standard proportions. When the base has set, the edges of the surface will be thoroughly heated with hot mastic; this mastic will then be removed and fresh hot mastic will be laid over the place to be repaired, and thoroughly ironed

with smoothing irons. This wearing surface will be five-eighths of an inch in thickness and composed of the following parts by weight, viz:

Seysell, or Neuchatel mastic.....	60
Asphaltic cement	4
Grit	36

These proportions may be slightly varied if deemed advisable to improve the quality of the wearing surface. The pavement must be equal in every respect to that laid on the north side of Pennsylvania avenue between Twelfth and Thirteenth streets NW.

GUARANTY.

All work of minor repairs will be guaranteed and kept in repair during the term of this contract.

PAYMENTS.

(1) Payments will be made monthly for all work certified as completed in accordance with these specifications.

(2) Bidders will note the fact that material for repairs to asphalt and coal-tar distillate surfaces will be paid for by the cubic yard instead of by the square yard as has heretofore been the rule. The material will be measured in the cart when brought upon the line of the work.

GENERAL SPECIFICATIONS.

[The contractor will be held responsible for maintenance for a period of five years after completion of work.]

TRENCHES.

(1) The ground will be excavated in open trenches to the necessary width and depth. The horizontal diameter of the sewer at the springing line, including the walls thereof, shall be considered the necessary width for the sewer trench. That portion formed for the invert of the sewer will be excavated to conform to the external form and dimensions of the same, should the nature of the ground so allow. If the character of the ground met with in the excavation is such that the external form of the sewer can not be preserved, the excavation will be made as near as possible to the external form of the sewer, and the space between the external sewer lines and the bottom lines of the excavation as made for a width equal to the outside horizontal diameter of the sewer at the springing line, will be filled with hydraulic cement concrete at the expense of the contractor, the cost of which shall be considered as an incident to the construction of the sewer.

If the material found in the bottom of the sewer trench contains substances decaying or liable to decay, or if, for any other reason, it is, in the opinion of the Engineer Commissioner, unsuitable for a foundation, upon receipt of a written order it will be removed to such depth and width as shall be therein directed, and suitable material will be deposited in its place, which will be paid for as extra work.

(2) All irregularities in the bottom or sides of the trench below the center of the sewer will be filled to the required form with hydraulic cement concrete, made as herein specified, at the expense of the contractor.

(3) Bracing and shoring will be used when necessary. The filling of the trench and removal of timber will be done in such manner as to prevent the slipping or caving of the sides as the work progresses. If ordered to be left in the trench, the bracing and shoring so left will be measured and paid for at a price to be determined by the Engineer Commissioner.

(4) Should the exigencies of the work so require, it will be carried on without intermission upon the order of the Engineer Commissioner.

(5) The excavations will be kept free from water during the construction of the work; no concrete or other work will be laid in water, and no allowance made for pumping or otherwise removing the water. All sides or caving of the sides of the trenches or cuts will be taken out and back filled and no additional price shall be paid therefor.

(6) The back filling must be brought up evenly to the top of the trench in layers not exceeding 6 inches in depth and thoroughly rammed; it being required that not less than double the labor expended in replacing the back filling shall be expended in compacting the same with iron-shod rammers, weighing not less than 12 pounds each.

(7) The contractor will replace all pavements disturbed in strict conformity with

the District of Columbia specifications for that class of pavement; any deficiency in materials of the pavement when disturbed, either in quantity, quality, or both, to be supplied by and at the expense of the sewer contractor, excepting asphalt, concrete, and granite block pavements, which will be relaid by and at the expense of the District. If, however, such pavements should be injured by the contractors outside the limits prescribed for the trenches, the cost of restoring such excess will be charged against the contractor and deducted from any amounts found due, and he will be required at his own expense to maintain the ground surface of the pavement over the line of trench with the best material available from the excavation, until such time as the pavement is relaid. The cost of subsequent repairs of all pavements whether relaid in the first instance by the District or by the contractor or of any other work, made necessary within the period for which this work is guaranteed, by after settlement in the filling of the trenches, will be charged against the 10 per cent retained and invested, as provided in paragraph 7 of the general stipulations hereto attached; and it is expressly agreed that this fund shall be subject to the control of the Commissioners of the District of Columbia for this purpose.

(8) The material from the trenches and that used in the construction of the work will be so deposited as not to endanger the work or unnecessarily obstruct public travel, and so that free access may be had at all times to all fire plugs and water gates in the vicinity of the work. The surplus earth, as hereinafter indicated, will be the property of the contractor, and must be hauled away and disposed of by him.

(9) The cost of removing the surplus earth will be included in the price paid for the sewer.

(10) A map and schedule is on file in the engineer department showing the location of the sewers included in the specifications, which can be seen by bidders. The right is reserved by the Commissioners of the District of Columbia to lay only such sewers shown on the map and schedule as may seem most necessary for the public benefit, or to add thereto an amount not exceeding 25 per cent.

(11) The depth of excavation may be taken at 10 feet to the bottom of the pipe inside, for pipe sewers, and 10 feet to the springing line of brick and concrete sewers. These depths are subject to modification, depending upon location and depths of existing sewers. Bidders are required to give a price for excavation and refilling, which price will be allowed in addition to the price bid for the sewer, in case of an increase, or deducted in case of a reduction, of the specified depths.

(12) No payment will be made on account of rock excavation for which a special order shall not have been given prior to said excavation. All excavated material shall be considered as of ordinary character, except rock excavation removed by special order as above. Indurated gravel, disintegrated rock, and materials of like character, in the opinion of the Engineer Commissioner, will not be classed as rock excavation.

SEWER.

(1) The sewers are to be constructed in strict conformity with the drawings furnished and the lines and levels given by the duly authorized assistant, and the directions given from time to time by the Engineer Commissioner or his agents. The work is subject to such modification as may be necessary during its progress, and in no case will any work in excess of the plans and specifications be paid for unless ordered in writing by the Engineer Commissioner.

(2) All railway tracks, water, sewer, and gas pipes, and other duly authorized structures will be properly supported and protected by the contractor during the construction of the work under or near them, so as not unnecessarily to interfere with their use.

(3) The connections with existing sewers and catch-basins will be made according to plans and directions, and the cost of said connections will be included in the price per foot for new sewers.

(4) Whenever it is necessary to extend or relay any part of the house laterals, to insure a proper connection, they must be laid and thoroughly imbedded in concrete, particularly where said laterals cross the old sewers. The old sewer must be closed at each manhole and wherever a house lateral crosses it, with brick masonry or concrete; the manhole frames or covers removed and the manholes filled with earth, thoroughly rammed, to the surface of the street or sidewalk.

BRICKWORK.

(1) The best quality of merchantable new bricks, burned hard and entirely through, free from injurious cracks, and with a crushing strength of not less than 5,000 pounds per square inch, will be used and must be thoroughly drenched immediately before laying. Every brick is required to be laid in full mortar joints. In no case is the joint to be made by working in mortar after the brick has been laid.

Every second course will be laid with a line, and joints will not exceed three-eighths of an inch. The brickwork of arches shall be properly bonded and keyed as directed.

(2) The vitrified fire-clay bricks to be used in inverts of main sewers will be of quality equal to sample vitrified bricks on file in the office of the Superintendent of Sewers and marked "sample vitrified fire-clay brick." Bidders may, however, submit proposals to furnish and use in the inverts of the sewers vitrified bricks of quality equal to that used by the District for paving gutters and alleys, in which case sample bricks must be submitted with the proposals.

TERRA COTTA INVERT BLOCKS.

(1) The egg-shape sewers will have terra cotta invert blocks in the bottom of the sewers, as shown by the section, which will be in quality equal to the sample block in the office of the Superintendent of Sewers and marked "terra.cotta invert block."

CONNECTION INLETS.

(1) One length of 6-inch terra-cotta pipe will be built into the arch of the main sewers at the springing line, and Y branches laid in the pipe sewers at such places as are shown on the plan or as may be ordered. These will be furnished to the contractor, at one of the property yards of the District free of cost, and are to be built in the sewers, and the ends projecting from the concrete foundations closed with brick and cement by the contractor.

MANHOLES.

(1) Brick manholes will be constructed in the sewer at intervals of 150 to 200 feet. They are to be of form and dimensions shown on the drawings.

Manholes are to be fitted with cast-iron frames and covers in dimensions, weight, and quality similar to those now used, and the drawings of which are on file in the office of the Engineer Commissioner.

(2) The iron is to be sound, free from imperfections, and thoroughly cleaned. Each manhole will be furnished with steps of wrought iron $\frac{1}{4}$ -inch in diameter, built into the brickwork as shown on drawings, conveniently arranged for access to sewer.

(3) Lateral sewer and receiving basin connections will be built into the manholes whenever required.

RECEIVING BASINS.

(1) Receiving basins will be built wherever shown on the plans, or ordered by the Engineer Commissioner. They will conform to the drawings, will be built with care and will be made water-tight by plastering the interior with mortar composed of one part each of sand and Portland cement, the thickness of the coat of mortar being $\frac{1}{2}$ of an inch.

(2) The tops of the basins will be covered with granite or bluestone heads set level with the sidewalk; the stones composing the tops will be rebated to receive a cast-iron cover similar to those now in use.

(3) Connections of basin with the sewers will be made with 12-inch pipes of terra cotta, laid in hydraulic cement concrete, as required by the District specifications for constructing pipe sewers.

MORTAR.

(1) Mortar used in this work will be composed of cement and sand, in the proportion of one part of cement and two parts of loose sand by measure, thoroughly mixed dry, and a sufficient quantity of water afterwards added to form a rather stiff paste; it will be used within an hour after mixing, and not at all if once set.

(2) All cements used will be furnished by the District cement house, and the cost of the same, at the rate of \$1.20 per barrel, will be charged against the contractor.

(3) Sand used shall be clean, sharp, free from loam, vegetable matter, or other foreign substance. A platform shall be provided upon which the sand shall be placed when brought upon the line of the work.

(4) Water used shall be fresh and clean, free from earth, dirt, and sewage.

(5) Tight mortar boxes shall be provided by the contractor, and no mortar shall be made upon the street otherwise than in such boxes. Upon asphalt pavements no mortar shall be made.

(6) The thorough mixing and incorporation of all materials will be insisted upon, preferably by machine labor, but if done by hand labor the dry cement and sand

will be turned over and mixed with shovels by skilled workmen not less than six times before the water is added. After adding the water the paste will be again turned over and mixed with shovels by skilled workmen not less than three times before it is used.

(7) The inner surface of the sewer from the invert fire-clay bricks or invert blocks to the springing line shall be coated with mortar three-eighths of an inch in thickness, of Portland cement, one part; sand, one and one-half parts. The surface upon which this mortar is applied shall be thoroughly wetted before the application of the coat of mortar, which must be well troweled.

(8) The invert bricks and the terra-cotta invert blocks will be laid in mortar composed of Portland cement, one part; sand, two parts.

CONCRETE.

(1) Concrete will be composed of natural cement mortar proportioned and mixed as before described, to which will be added broken stone, so that the resultant mass shall contain for each part of cement two parts of sand and five parts of stone, all parts by measures.

(2) The broken stone will be thoroughly cleaned from all foreign substances, and will be screened whenever ordered. Sand, detritus, or any material other than hard angular fragments of stone which will be retained upon a No. 10 screen, will be considered a foreign substance. The stone will be broken to a size not greater than 2 inches in its greatest dimensions.

A platform should be provided upon which shall be delivered all broken stone brought upon the line of the work.

(3) The stone will be added immediately after mixing the mortar, being first drenched with water. The whole mass shall be thoroughly turned over and mixed until every piece of stone is enveloped with mortar, using only sufficient water to insure the proper incorporation of the ingredients.

(4) The contractors shall furnish the inspectors with proper means and facilities for weighing the cement and for measuring the sand and stone.

(5) All work and material to be paid for will be measured and determined according to the specifications, and the plans and working lines which shall be given.

(6) All material furnished and all work done not in accordance with these specifications shall be removed with twenty-four hours after written notice from the Engineer Commissioner, by and at the expense of the contractor, or, in case of his failure to do so, it will be removed and the cost charged to the contractor, and deducted from the amount due or which may become due him.

(7) Material to be furnished by the District (consisting of sewer pipe, branches, and cements) will be hauled from the place of storage to the work by the contractor.

(8) The contractor will be required to refill trenches, remove surplus material and supplies, and restore the streets to their original condition with promptness; also to maintain suitable bridges over trenches at street-crossings in such manner as to accommodate travel on foot or by vehicle, as shall be directed. Lights necessary for properly lighting the trenches or other obstructions to travel must be maintained at the expense and risk of the contractor, who shall be liable to the District for all and every damage, public or private, that may occur in connection with his work.

Lamps shall be kept burning at night at both ends of obstructions and at intervals of not more than 50 feet, and when a distance of 500 feet or more is obstructed the contractor shall employ a watchman to guard it.

SPECIFICATIONS FOR TERRA COTTA MATERIAL.

QUALITY AND DESCRIPTION.

First. The pipe will be the best salt-glazed, ring pipe in 3-foot lengths, of good clay, thoroughly burned, perfectly cylindrical in form, and straight, not varying a quarter of an inch in diameter or line, the edges and surfaces true and free from defects. The branches will be in lengths of 2 feet, and in other respects similar to the common pipe. With each length of pipe and branches will be furnished one ring of the same material for covering the joint. With each branch pipe will be furnished a stopper, which will be a simple disk of vitrified clay three-fourths of an inch thick, to fit snugly within the bell end of the 6-inch outlet. All material furnished will be fully equal in quality to the sample submitted with the accepted proposal. The right is reserved to increase the estimated quantities by not exceeding 20 per cent.

CONDITIONS OF DELIVERY.

Third. Material shipped by rail will be delivered at such points in the vicinity of the track as may be designated. In every case the cost of unloading and delivering the material ready for inspection will be paid by the contractor.

The material will be inspected upon delivery, and all which does not conform to the foregoing specifications in size, quality, or condition will be removed by the contractor. The contractor will also furnish such laborers as may be deemed necessary by the Engineer Commissioner to assist his agents in inspecting and culling the material. No approval by the inspector shall prevent rejections on account of any defects which may be discovered before the final payment.

Fourth. Bids will be received for the whole amount of material or for any part thereof, but the successful bidder or bidders will be required to deliver not less than one-fourth of the amount awarded in his contract during each of the months of —, —, —, and —. In case these conditions are not complied with, the Commissioners may proceed on the dates above named to supply the deficiency by purchases in open market; and should the cost of these purchases exceed the contract price, the excess will be charged to the contractor, a sufficient balance being temporarily retained from the amounts due him in order to cover this contingency.

Fifth. Partial payments on and after —, —, subject to the above condition, will be made from time to time for an amount not less than one-fourth the award in each case, but 10 per cent will be retained from each partial payment until 30 days after the delivery of the last lot.

SPECIFICATIONS FOR CEMENT.

All tests shall be made by the methods and under the conditions prescribed by the committee of the American Society of Civil Engineers, and to be open to contractors.

NATURAL CEMENT.

[To be delivered in barrels to weigh 300 pounds net.]

(1) *Fineness*.—Not less than 92 per cent. to pass through a 50-mesh sieve, and not less than 82½ per cent to pass through a 100-mesh sieve.

(2) *Time of setting*.—Initial set in not less than ten nor more than forty-five minutes, when mixed, from the 1st of June till the 1st of October, with the smallest possible amount of water at the temperature at which it flows from the tap in the laboratory of the inspector of asphalts and cements at the time of mixing; and from the 1st of October to the 1st of June, when mixed with water at the temperature of the air in said laboratory, about 70° F.

(3) *Tensile strength*.—One day (in air till hard set, rest of day in water), neat, 30 pounds; seven days (in air one day, in water six days), neat, 70 pounds; two parts sand, 20 pounds; twenty-eight days (in air 1 day, in water twenty-seven days), neat, 170 pounds; two parts sand, 50 pounds.

PORTLAND CEMENT.

[Barrels to weigh 400 pounds gross, average.]

(1) *Fineness*.—Not less than 95 per cent to pass through a 50-mesh sieve, and not less than 85 per cent to pass through a 100-mesh sieve.

(2) *Time of setting*.—Initial set in not less than one hour when mixed with water under the same conditions as with natural cement, except where a quick cement is desired, which should set in less than ten minutes.

(3) *Tensile strength*.—One day (in air till hard set, in water rest of day), neat, 125 pounds; seven days (in air one day, in water six days), neat, 300 pounds; three parts sand, 100 pounds; twenty-eight days (in air one day, in water twenty-seven days), neat, 400 pounds; three parts sand, 125 pounds.

All cements will be from time to time subjected to chemical analysis, and must show freedom from any foreign substances or deleterious matter, and that the elements are combined in proper proportion to secure the best results and insure permanency.

Approximate quantities of cement needed at this letting: Natural cement, 16,000 barrels; Portland cement, 1,500 barrels.

GENERAL SPECIFICATIONS.

(1) The District cement house is located on Canal street, between First street and Delaware avenue southwest. This storehouse will be used for the storage of all cements purchased in pursuance of these specifications.

(2) The cements named in the foregoing schedule are to be furnished and delivered at the storehouse mentioned in the preceding paragraph, in such quantities as may be ordered by the Engineer Commissioner, and all must be of the quality accepted, and in strict conformity with the samples upon which the proposal is submitted.

(3) Bidders must submit with their proposals samples of cement which they propose to furnish, giving the name of brand, name of manufacturer, and place of manufacture. The samples must be not less than 10 pounds in weight.

(4) Cements shall, as far as practicable, be delivered in sufficient time to enable a twenty-eight day test to be made of them before they are accepted, and a sufficient quantity must be kept on hand to meet all the requirements of the District.

(5) All cement rejected or condemned shall, upon order of the Engineer Commissioner, be immediately removed from the storehouse by the contractor, or it will be done by the District at his risk and expense.

(6) The amounts named are approximate estimates of the quantities required for the year ending June 30, 1891, but the right is reserved to order more or less of each item named.

(7) No award will be made except to bona fide dealers in the articles aforesaid.

(8) Bids will be addressed to the Commissioners, District of Columbia, and be so marked on the outside envelope as to indicate their contents. Proposals forwarded otherwise than by mail must be delivered to the Secretary of the Board.

(9) The Commissioners reserve the right to reject any or all bids or parts of bids.

(10) Should the contractor fail to comply with the conditions of his contract, the Commissioners reserve the right to purchase the required articles in open market, at the expense of the contractor, or to annul the contract and withhold all money that may be due, or become due, and apply the same to the settlement of any increased expense to the District that may be consequent upon the contractor's failure.

SPECIFICATIONS FOR SAND, GRAVEL, AND BROKEN STONE.

(1) Sand for surface work or concrete shall be clean river sand, free from clay, loam, or vegetable matter.

(2) Sand for mortar shall be clean, sharp river sand, entirely free from pebbles, clay, loam, vegetable matter, or other objectionable material.

(3) Gravel shall be fine bank or river gravel, free from earthy matter, and from pebbles larger than 1 inch in their largest dimensions.

(4) The broken stone shall be of hard compact texture, and will be thoroughly cleaned from all foreign substances, and *will be screened whenever ordered*. Sand, detritus, or any material other than hard angular fragments of stone which will be retained upon a No. 10 screen will be considered a foreign substance. The stone will be broken to a size not greater than 2 inches in its greatest dimensions.

TABULAR STATEMENT OF STREET IMPROVEMENTS (CITY) DONE UNDER CONTRACT.

GEORGETOWN SCHEDULE.

Date.	No. of con-tract.	Contractor.	Locality.	Square yards.	Price square yard.	Contract work.	M in ia	To al cost.	Remarks.
1890. Sept. 15	1317	The Barber Asphalt Paving Co.	Thirty-fifth street from U to Tennially-town road.	6, 009. 13	\$2. 25	\$17, 013. 79	\$1, 227. 90	\$18, 241. 69	Asphalt on hydraulic base.
			Thirty-fourth street from P to R.....	2, 264. 05	2. 00	6, 792. 82	1, 701. 08	8, 493. 90	Asphalt on bituminous base.
			O street from Twenty-eighth to Twenty-ninth.	859. 85	2. 00	2, 156. 60	171. 29	2, 327. 89	Do.
			Q street from Thirty-fifth to High	4, 001. 98	2. 00	11, 618. 92	2, 517. 09	14, 136. 01	Do.
Sept. 16	1328	John Dugan	Thirty-fourth street from R to High ..	4, 892. 14	. 36 2/3	5, 180. 88	4, 774. 63	8, 983. 88	Macadam, \$407.67 deducted for stone furnished and \$563.96 for deficiency in macadam roadway=\$971.63.
		Total .....	.....	18, 027. 15	.....	42, 763. 01	10, 391. 99	52, 183. 37	

NORTHWEST SCHEDULE.

1890. Sept. 15	1316	The Barber Asphalt Paving Co.	I street from Twentieth to Twenty-third.	6, 295. 58	\$1. 20	\$13, 988. 62	\$3, 203. 52	\$17, 192. 14	Asphalt on macadam base.
			Twenty-third street from I to Penn-sylvania avenue.	1, 424. 79	1. 20	3, 171. 99	175. 22	3, 347. 21	Asphalt on cobble-stone base.
			P street from Fourth to North Capitol.	7, 134. 71	2. 00	19, 142. 63	4, 852. 68	23, 995. 31	Asphalt on bituminous base.
Sept. 15	1317	do	Boundary from Fourth to New Jersey avenue.	3, 153. 81	2. 00	8, 410. 28	631. 19	9, 041. 47	Do.
			Eleventh street from O to Boundary ..	8, 733. 77	2. 25	30, 263. 08	6, 855. 19	37, 118. 27	Asphalt on hydraulic base.
Sept. 15 Sept. 17	1318 1329	do	New York avenue from New Jersey avenue to North Capitol.	5, 603. 60	2. 00	14, 435. 32	604. 30	15, 039. 62	Asphalt on bituminous base.
			New Hampshire avenue from T to V ..	6, 805. 01	2. 00	18, 936. 46	3, 136. 91	22, 073. 37	Do.
			R street from Seventh to Boundary ...	7, 551. 28	2. 25	23, 875. 28	5, 837. 14	29, 712. 92	Asphalt on hydraulic base.
			R street from Sixteenth to New Hamp-shire avenue.	3, 918. 20	2. 00	12, 222. 87	2, 649. 87	14, 872. 74	Asphalt on bituminous base.
			Twelfth street from V to Boundary ...	3, 553. 67	2. 25	10, 465. 31	2, 076. 63	12, 541. 94	Asphalt on hydraulic base.
			Twenty-fifth street from Pennsylva-nia avenue to K.	1, 163. 37	2. 00	3, 402. 60	743. 62	4, 146. 22	Asphalt on bituminous base.
Sept. 15	1319	Andrew Gleeson	Fourth street from New Jersey avenue to Boundary.	2, 400. 52	. 79	3, 092. 31	4, 839. 38	7, 931. 69	Granite block.
Sept. 15	1319	do	B street from Sixth to Seventh.....	1, 675. 03	. 77	2, 546. 60	4, 105. 15	6, 651. 65	Do.

TABULAR STATEMENT OF STREET IMPROVEMENTS (CITY) DONE UNDER CONTRACT—Continued.

NORTHWEST SCHEDULE—Continued.

Date.	No. of con-tract.	Contractor.	Locality.	Square yards.	Price square yard.	Contract work.	Material.	Total cost.	Remarks.
1890. Sept. 17	1330	The Cranford Paving Co....	Fourth street from New Jersey avenue to Boundary.	4,594.02	\$2.25	\$12,696.84	\$840.94	\$13,537.78	Asphalt on hydraulic base.
1891. June 15	1471	do	U street from Ninth to Tenth..... Eighteenth street from New Hampshire avenue to S.	2,301.11 3,129.91	2.25 2.25	7,056.29 8,786.36	1,399.65 2,009.31	8,455.94 10,795.67	Do. Do.
		Total .....	.....	69,438.48	.....	192,493.24	43,960.70	236,453.94	

SOUTHWEST SCHEDULE.

1892. Oct. 6	1361	W. H. Mohler	Delaware avenue from C to G.....	4,727.17	\$0.91	\$6,873.58	\$3,314.94	\$10,188.52	Macadam.
Sept. 13	1319	Andrew Gleeson.....	M street from Sixth to Water.....	757.16	.77	1,096.54	1,666.47	2,763.01	Granite blocks.
Sept. 15	1321	W. H. Mohler	G street from One Half to South Capitol.	6,516.95	.77	5,653.98	13,035.87	18,689.85	Do.
Sept. 17	1330	The Cranford Paving Co.....	G street from One Half to Third.....	2,578.49	2.25	8,539.51	2,191.83	10,731.34	Asphalt on hydraulic base.
Sept. 15	1316	The Barber Asphalt Paving Co.	D street from First to Third..... E street from South Capitol to First..... Eighth street from B to C.....	3,104.11 1,434.14	2.00 1.20	7,058.70 3,054.10	 104.30	7,058.70 3,158.40	Asphalt on bituminous base. Asphalt on rubble base.
		Total .....	.....	19,118.02	.....	32,276.41	20,313.41	52,589.82	

SOUTHEAST SCHEDULE.

1890. Sept. 15	1322	W. H. Mohler	Tenth street from East Capitol to Pennsylvania avenue.	4,728.26	\$0.93	\$7,276.60	\$808.37	\$8,084.97	Macadam.
			Second street from D to G	2,099.43	.93	4,256.00	579.14	4,591.74	Macadam; \$243.40 deducted on account of deficiency in macadam roadway.
Sept. 15	1324	P. Maloney	G street from Eleventh to Pennsylvania avenue.	1,730.24	2.00	5,547.13	2,537.42	8,084.55	Asphalt blocks.
			B street from Eleventh to North Carolina avenue.	4,577.53	2.00	12,908.09	2,567.13	15,475.22	Do.

Sept. 15	1325	The Barber Asphalt Paving Co.	North Carolina avenue from Sixth to Eighth.	6, 377.84	2.00	14, 538.28	2, 176.42	16, 714.70	Asphalt blocks.
			C srteet (north side) from Fourth to Sixth.	1, 463.64	2.00	3, 440.62	58.87	3, 499.49	Do.
			C street (south side) from Fourth to Sixth.	1, 613.50	2.00	3, 743.66	70.39	3, 814.05	Do.
			South Carolina avenue from Sixth to Seventh.	3, 287.74	2.00	7, 746.17	1, 467.84	9, 214.01	Do.
Oct. 6	1361	W. H. Mohler.....	I street from Third to Eighth.....	4, 249.49	.93	6, 061.02	734.92	6, 795.94	Macadam.
			Seventh street from Virginia avenue to M.	1, 785.25	.93	2, 960.77	550.71	3, 245.93	Macadam; \$265.55 deducted on account of deficiency in macadam roadway.
Sept. 15	1326	E. E. Barnes	B street from Eleventh to Nineteenth.	12, 004.36	.75	18, 183.94	1, 946.80	19, 882.74	Macadam; \$248 deducted for inspection.
		Total .....	.....	43, 917.28	.....	86, 662.28	13, 498.01	99, 403.34	

NORTHEAST SCHEDULE.

1890. Sept. 15	1316	The Barber Asphalt Paving Co.	Ninth street from H to Maryland avenue.	5, 781.15	\$2.00	\$14, 895.72	\$3, 066.76	\$17, 962.48	Asphalt on bituminous base.
Sept. 15	1320	Andrew Gleeson.....	Eighth street from I to K.....	1, 310.93	.96	1, 781.18	184.33	1, 780.57	Macadam; \$184.94 deducted for deficiency in macadam roadway.
			Twelfth street from Maryland avenue to H.	3, 321.56	.96	4, 450.26	736.11	4, 342.14	Macadam; \$844.23 deducted for deficiency in macadam roadway.
			G street from Sixth to Seventh.....	1, 767.60	.96	2, 794.27	417.20	2, 779.30	Macadam; \$432.17 deducted for deficiency in macadam roadway.
Sept. 15	1324	P. Maloney	Maryland avenue from Thirteenth to Boundary.	9, 635.10	2.00	21, 694.86	3, 144.97	24, 839.83	Asphalt blocks.
Sept. 15	1325	do	Ninth street from Massachusetts avenue to Maryland avenue.	6, 711.88	2.00	17, 298.64	4, 290.62	21, 589.26	Do.
			Eighth street from Maryland avenue to B.	5, 855.97	2.00	13, 195.84	2, 449.54	15, 645.38	Do.
Sept. 17	1331	The Cranford Paving Company.	First street from C to F	5, 616.24	2.00	13, 766.00	229.46	13, 995.46	Asphalt on bituminous base.
1891. June 13	1465	P. Maloney	Second street from F to H	3, 884.92	2.00	9, 513.88	81.35	9, 595.23	Do.
			Fourth street from C to D	836.92	2.00	1, 957.20	14.72	1, 971.92	Asphalt blocks.
		Total .....	.....	44, 722.27	.....	101, 347.85	14, 615.06	114, 501.57	

TABULAR STATEMENT OF STREET IMPROVEMENTS (CITY) DONE UNDER CONTRACT—Continued.

PERMIT WORK—ROADWAYS.

Date.	No. of contract.	Contractor.	Locality.	Square yards.	Price square yard.	Contract work.	Material.	Total cost.	Remarks.
1890. Sept. 17	1332	The Cranford Paving Co . . .	California avenue from Eighteenth to Nineteenth street. Second street NE. from R to T R street from Fourth to Brentwood road. Fourth street from R to Railroad Connecticut avenue from California avenue to Kalorama avenue. California street from First and Second to E and F streets. Eighteenth street from Florida avenue to Columbia road. Eckington Place from Q to R streets. Quincy street from Lincoln avenue to Eckington Place. First street extended from Q to R	2, 152. 83 4, 213. 24 2, 321. 00 860. 83 2, 195. 00 1, 635. 35 3, 206. 32 1, 559. 99 3, 769. 93 2, 206. 10 24, 120. 59	\$2. 00 2. 00 2. 25 2. 25 2. 00 2. 25 2. 00 2. 25 2. 25 2. 25	\$4, 453. 06 8, 701. 68 6, 775. 19 2, 867. 11 4, 390. 00 4, 520. 37 6, 412. 64 4, 471. 56 9, 605. 81 6, 482. 93 58, 689. 35	 \$218. 34 316. 14 1, 070. 03 425. 89 1, 974. 45 875. 55 4, 880. 40	\$4, 453. 06 8, 701. 68 6, 993. 53 3, 183. 25 4, 390. 00 5, 599. 40 6, 412. 64 4, 897. 45 11, 580. 26 7, 358. 48 63, 509. 75	Asphalt on bituminous base. Do. Asphalt on hydraulic base. Do. Asphalt on bituminous base. Asphalt on hydraulic base. Asphalt on bituminous base. Asphalt on hydraulic base. Do. Do.
		Total .....	.....	24, 120. 59	.....	58, 689. 35	4, 880. 40	63, 509. 75	

TABULAR STATEMENT OF REPAIRS TO CONCRETE PAVEMENTS.

Date.	Contract.	Contractor.	Locality.	Square yards.	Price.	Cubic yards.	Price.	Contract work.	Material.	Total cost.	Remarks.
1888. Aug. 11	947	H. L. Cranford	East Capitol street (north side), from First to Ninth.	2, 194.51	\$1.02	.....	.....	\$3, 169.63	.....	\$3, 169.63	Resurfacing.
			F street, from Fourteenth to Fifteenth.	3, 124.28	1.02	.....	.....	3, 681.78	\$16.69	3, 698.47	Do.
			Thirteenth and F streets	435.15	1.02	.....	.....	750.50	22.76	773.26	Do.
			F street, from Ninth to Twelfth	5, 317.30	1.02	.....	.....	7, 513.27	14.27	7, 527.54	Do.
			Tenth street, from New York avenue to K.	1, 613.12	1.02	.....	.....	2, 071.94	62.58	2, 134.52	Do.
			Eighth street, from N to L	3, 546.21	1.02	.....	.....	3, 916.68	8.88	3, 925.56	Do.
			Fifteenth street (west side), from I to K.	1, 828.01	1.02	.....	.....	2, 345.72	62.58	2, 408.30	Do.
			L street, from Sixteenth to Seventeenth.	2, 326.99	1.02	.....	.....	3, 032.76	.....	3, 032.76	Do.
			Thirteenth street SW., from B to Maryland avenue.	5, 347.01	1.02	.....	.....	7, 263.18	250.45	7, 513.63	Do.
			Twenty-first street, from K to Q	10, 845.35	1.02	.....	.....	13, 177.48	8.21	13, 185.69	Do.
			Pennsylvania avenue, from First to Third.	4, 657.48	1.02	.....	.....	7, 943.64	.....	7, 943.64	Do.
			H street NE., from North Capitol to Second.	3, 451.40	1.02	.....	.....	5, 658.57	.....	5, 658.57	Do.
			Nineteenth street, from Q to R	2, 048.19	1.02	.....	.....	3, 481.97	.....	3, 481.97	Do.
			G street, from Eleventh and Twelfth to Thirteenth and Fourteenth.	2, 350.93	1.02	.....	.....	3, 464.95	.....	3, 464.95	Do.
			F street, from Twelfth to Thirteenth.	890.28	1.02	.....	.....	1, 492.64	.....	1, 492.64	Do.
			Various minor repairs	.....	.....	1, 927.5012	\$17.00	46, 445.50	.....	46, 445.50	Includes base, binder, and cutting out.
		Total	.....	49, 976.31	.....	1, 927.5012	.....	115, 410.21	446.42	115, 856.63	

TABULAR STATEMENT OF WORK DONE ON SUBURBAN STREETS AND COUNTY ROADS.

Suburban schedule.

Date.	Contract.	Contractor.	Locality.	Square yards.	Price.	Contract work.	Material.	Total cost.	Remarks.
1890. Sept. 15	1319	Andrew Gleeson	Nichols avenue..... Brightwood avenue, from Irving northward.	1,687.23 2,749.40	\$0.79 .79	\$2,000.27 3,365.58	\$4,805.93 5,917.85	\$6,806.20 9,283.43	Granite block. Granite block.
Sept. 15	1317	The Barber Asphalt Paving Co.	Larch street, from Boundary to Maple.	1,516.45	2.00	4,152.08	181.48	4,333.56	Asphalt on bituminous base.
Sept. 15	1318	The Barber Asphalt Paving Co.	Fourteenth street, from Yale north- ward.	3,725.21	2.25	10,421.52	1,707.07	12,128.59	Asphalt on hydraulic base.
			R street, from Lincoln avenue to Boundary.	{ 2,041.11 3,050.88	{ 2.25 2.00	{ 12,517.75 8,838.73	{ 2,257.82 540.83	{ 14,775.57 9,379.56	{ Asphalt on bituminous and hydraulic base.
			Maple street, from Boundary to Lin- den.	3,227.32	2.00	8,838.73	540.83	9,379.56	Asphalt on bituminous base.
1891. May 23	1444	The Barber Asphalt Paving Co.	Linden street, from Boundary to Col- lege.	1,531.73	2.25	4,819.16	132.75	4,951.91	
		Total .....	.....	19 529.33	.....	46,115.09	15,543.73	61,658.82	

Suburban streets and roads—grading and regulating.

Date.	Contract.	Contractor.	Locality.	Cubic yards grad- ing.	Price.	Square yards.	Price.	Contract work.	Material.	Total cost.	Remarks.
1890. Oct. 16	1360	W. H. Mohler.....	Bunker Hill road from Queens Chapel road to Lincoln avenue.	7,465.00	\$0.18	19,686.00	{ \$0.18 } { .25 }	\$4,631.76	\$99.44	\$4,731.20	Graveling.
			Brentwood road.....	5,377.30	.18	2,727.50	1.00	4,726.75	.....	4,726.75	Macadam.
Oct. 9	1363	Andrew Gleeson .	Takoma Park	6,519.00	.20	11,106.45	.45	7,831.91	1,757.05	9,588.96	Gravel.
Oct. 16	1371	M. F. Talty.....	Naylor road	7,166.40	.17	5,979.70	.18	2,368.38	.....	2,368.38	Do.
			Howard avenue, from Sixth street to Brightwood avenue.	894.00	.16	692.27	.90	1,174.90	166.31	1,341.21	Macadam.
			Lincoln avenue from Florida avenue to Bunker Hill road.	10,502.00	.16	2,042.38	{ .35 } { .90 }	8,030.82	1,611.39	9,642.21	Do.
			North Capitol, from Florida avenue to T street.	13,547.00	.16	4,064.34	.90	8,163.36	1,389.18	9,133.40	Macadam; \$419.14 deducted for deficiency in macadam roadway.
			California avenue, from Columbia road westward.	3,262.00	.16	2,208.59	.90	4,185.22	520.96	4,706.18	Macadam.
Oct. 16	1377	T. H. Lyons	Kenesaw street, from Fourteenth to Sixteenth.	18,701.00	.17½	9,449.98	.10	6,256.35	152.25	6,408.60	Gravel.
			Wallach street, from Seventh to Fourteenth.								
1891. Feb. 14	1422	W. F. Collins	First street extended from Florida avenue to T.	1,997.00	.17	3,379.50	.26	1,894.73	.....	1,681.98	Macadam; \$212.75 deducted for deficiency in macadam roadway.
Feb. 13	1410	H. C. Bolden	Laurel avenue.....	1,400.00	.17½	.....	.....	245.00	.....	245.00	Grading; incomplete.
Feb. 13	1411	M. F. Talty.....	Brightwood avenue, from Rock Creek Church road to District line.	12,508.00	.18	.....	.....	5,047.52	494.40	5,541.92	Culverts and grading.
			Connecticut avenue, from Columbia road to Woodley road.	17,233.00	.17	.....	.....	4,678.90	283.18	4,962.08	Grading.
June 15	1450	do	Brightwood avenue, from Rock Creek Church road to District line.	1,681.00	.18	.....	.....	2,936.62	1,107.00	4,043.52	Grading curb and side-walk.
Feb. 13	1412	do	Ridge and Loughboro roads.....	10,628.00	.18	8,036.90	.20	4,708.25	18.30	4,726.55	Gravel.
			Seventeenth street extended, from Howard avenue northward.	4,595.00	.18	2,218.30	.20	1,597.27	237.80	1,835.07	Do.
Feb. 27	1419	T. H. Lyons	New Cut road.....	3,871.00	.23	3,695.33	.43	2,517.45	.....	2,517.45	Macadam.
			Eighteenth street extended, from Boundary to Columbia road.	3,441.00	.17	.....	.....	2,103.02	4,808.77	6,911.79	Grading curb and side-walk.
June 4	1453	J. Frawley.....	Anacostia road.....	20,000.00	.18½	9,000.00		6,455.70	222.00	6,677.70	Gravel; incomplete.
		Total		150,427.70		85,187.24		79,551.91	12,868.03	91,789.95	

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CONTRACTS FOR GRADING STREETS, ALLEYS, AND ROADS.

Date.	Contract.	Contractor.	Locality.	Cubic yards.	Price.	Total cost.
Aug. 29, 1890	1, 307	F. E. Middleton	Hartford	1, 660	Cents. 10	\$166. 00
Sept. 29, 1890	1, 346	Lipscomb & Saunders	Holmead's subdivision	10, 000	10	1, 000. 00
Sept. 27, 1890	1, 348	M. F. Talty	N street NE., from First to North Capitol.	10, 000	10	1, 000. 00
Sept. 23, 1890	1, 349	Britton & Bell	Tunlaw Heights	10, 000	10	1, 000. 00
Sept. 27, 1890	1, 353	D. McNamara	Randolph street, from Lincoln avenue to First	9, 802	10	980. 20
Sept. 29, 1890	1, 354	J. Paul	Clary street, from North Capitol to First.	10, 000	10	1, 000. 00
Oct. 3, 1890	1, 355	J. H. Brooks	Philadelphia	4, 000	10	400. 00
Do	1, 356	W. H. Walker	Thirteenth extended NE.	4, 000	10	400. 00
Do	1, 357	H. Barton	Omaha	2, 000	10	200. 00
Oct. 4, 1890	1, 358	J. E. Beal	Fairview Heights	10, 000	10	1, 000. 00
Do	1, 359	Wm. Mayse	Alley, square 780	1, 100	10	110. 00
Oct. 9, 1890	1, 364	Andrew Gleeson	Patterson street NE., from North Capitol to First.	10, 000	10	1, 000. 00
Oct. 15, 1890	1, 373	J. G. Myers	Ward Place	2, 200	10	220. 00
Oct. 13, 1890	1, 380	D. Horan	Patterson street, from North Capitol to First.	4, 884	10	488. 40
Jan. 28, 1891	1, 404	H. Waters	Hickman street SE., from First to Second.	8, 000	10	800. 00
Jan. 26, 1891	1, 406	W. A. Fry	Ontario and Erie	10, 000	10	1, 000. 00
Dec. 18, 1890	1, 408	J. F. Collins	Orleans and Morton	2, 900	10	290. 00
Feb. 5, 1891	1, 413	G. J. Mueller	Alley, square 992	710	10	71. 00
Feb. 19, 1891	1, 414	Albert Gleason	Roanoke street, from Thirteenth to Fourteenth.	5, 000	10	500. 00
Mar. 14, 1891	1, 423	D. Looney	New York avenue, from North Capitol to First.	4, 000	10	400. 00
Apr. 18, 1891	1, 428	Hood & Batchelder	Sixteenth, Seventeenth, S and T streets extended.	3, 500	10	350. 00
	Order.	H. T. Simpson	Ninth and N streets NE.	930	7	63. 00
	Order.	G. W. F. Swartzell	Half street SW. from M to N.	217	10	21. 70
	Order.	C. Early	Madison street from Sixteenth to Seventeenth.	965	10	96. 50
Feb. 14, 1891	1, 431	C. A. Baker	Langdon Park	9, 667	10	966. 70
Apr. 8, 1891	1, 440	A. M. Bliss	Twenty-eight street extended.	8, 000	10	800. 00
Aug. 4, 1891	1, 552	D. B. Groff	Brightwood Park	10, 000	10	1, 000. 00
Oct. 7, 1890	1, 390	C. W. King	Edgewood	5, 000	10	500. 00
May 23, 1891	1, 452	A. M. Bliss	Twenty-eighth street extended.	16, 000	10	1, 600. 00
	Order.	F. W. Huidekoper	Burleith	10, 000	10	1, 000. 00
	Order.	H. Sharpless	Harvard street from Eleventh to Thirteenth.	450	10	45. 00
June 8, 1891	1, 456	D. McPherson	Kansas avenue	3, 500		
		Total		193, 450		18, 818. 50

TABULAR STATEMENT OF WORK DONE FOR RAILROAD COMPANIES.

Company.	Locality.	Square yards.	Cubic yards.	Cost.
Washington and Georgetown.	Fourteenth street, from H Boundary	16. 40	7. 69	\$161. 43
	Fourteenth street, from Yale northward.	391. 06		959. 51
	Pennsylvania avenue, from First street to Nineteenth.	224. 66	13. 40	804. 86
	Ninth street and Pennsylvania avenue		0. 07	2. 19
	New Jersey avenue, from B street to C		1. 60	27. 20
Total		241. 15	22. 76	995. 68
Metropolitan	Fourteenth street, from H to New York avenue.		0. 93	18. 82
	East Capitol street, from First to Ninth.	336. 14		598. 68
	B street, from Sixth to Seventh	236. 58	2. 53	755. 07
	F street, from Fifth to Fourteenth	81. 00	12. 78	505. 73
	Ninth street, from Pennsylvania to Massachusetts avenues.		1. 28	28. 56
	Seventeenth and I streets		0. 09	1. 81
	Seventeenth and H streets		6. 38	170. 88
	New Jersey avenue and C street		0. 54	11. 84
Total		653. 62	24. 53	2, 091. 39

TABULAR STATEMENT OF WORK DONE FOR RAILROAD COMPANIES—Cont'd.

Company.	Locality.	Square yards.	Cubic yards.	Cost.
Capitol, O Street and South Washington.	Fourth street, from M to New Jersey avenue.	524.83	.....	1,554.49
	Fourteenth street and Pennsylvania avenue.	.....	3.39	102.92
	O street, from Fourth to Eleventh	.....	9.46	246.00
	Eleventh street, from R to Boundary	1,790.06	.....	4,801.28
	Thirteenth street and Ohio avenue.	.....	0.27	6.48
	Eleventh street, from E to N.	.....	26.38	850.55
	E street, from Ninth to Eleventh	.....	4.64	103.24
	Fourth and M street.	.....	0.93	35.95
	P street, from New Jersey avenue to Ninth street.	.....	0.93	20.66
	Pennsylvania avenue and First street.	.....	0.12	2.04
Total .....	.....	2,314.89	46.12	7,723.61
Columbia	Fourth street and Massachusetts avenue.	.....	1.07	30.87
	Massachusetts avenue, from Fourth street to Seventh.	.....	0.06	1.23
Total .....	.....	.....	1.13	32.10
Eckington and Soldiers' Home.	New York avenue, from New Jersey avenue to North Capitol street.	3,447.94	.....	7,342.77
	R and North Capitol streets	130.13	.....	260.26
	G street, from Third to Fifteenth.	.....	21.10	525.93
	Fifth street, from G to New York avenue.	.....	24.62	512.12
	Ninth and G streets	.....	2.21	53.31
	Seventh and G streets	.....	1.97	49.99
	Lincoln avenue.	.....	.....	568.10
	North Capitol street.	.....	.....	1,233.48
Total .....	.....	3,578.07	.....	10,546.05
Brightwood Avenue .....	.....	302.00	.....	855.76
Anacostia and Potomac River	Third street SW., from Maryland avenue to Maine.	.....	0.10	1.76
	M street SW., from Sixth to Water	155.84		428.86
	Nichols avenue.	268.33		767.37
Total		424.17	0.10	1,197.96

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CONSTRUCTION MATERIAL CONTRACTS.

No.	Date.	Contractor.	Description.
1890.			
1254	Aug. 11	Washington Brick Machine Co.	3,000,000 paving and 250,000 arch bricks.
1285	Aug. 20	P. Maloney	3,000,000 asphalt blocks and 50,000 tiles.
1294	Aug. 21	Potomac Stone Co	2,000 cubic yards broken stone.
1333	Sept. 13	John Robrecht	400,000 vitrified paving bricks.
1335	Sept. 23	Westham Granite Co	400,000 granite paving blocks.
1342	Sept. 22	George Pierce	Granite curb.
1344	Sept. 24	T. R. Smith	Do.
1352	Sept. 30	J. G. & J. M. Waters	Cement.
1384	Sept. 23	A. V. Gude	Granite curb.
1392	Nov. 19	Acker & Co.	Bluestone flagging.
1397	Aug. 19	Potomac Terra Cotta Co	Sewer pipe.
1400	Dec. 20	Brandywine Granite Co.	Granite curb.
1891.			
1409	Feb. 6	S. S. Richardson	Cement.
1421	Mar. 3	Maryland Pavement Co.	350,000 asphalt paving blocks.
1426	Apr. 28	Camden Iron Works	Cast-iron water pipe.
1427	Apr. 28	do	Cast-iron water pipe and special castings.
1430	Apr. 30	J. A. Haydon	160,000 vitrified bricks.
1435	May 9	Fred Stone & Co.	36 6-inch 2-way valves.
1436	May. 9	do	Valves, 6 and 8 inches.
1438	May 8	Stillwell Manufacturing Co.	20 6-inch 3-way valves.
1439	May 8	do	45 6-inch 4-way valves.
1442	May 7	D. S. B. Chew	75,000 pounds special castings.
1443	May 7	do	9,600 linear feet 12-inch cast-iron pipe.
1451	May 23	T. Somerville & Sons	1 16-inch and 2 20-inch 2-way valves.
1457	June 9	John Booth	100,000 granite paving blocks.
1458	June 9	Westham Granite Co	350,000 granite paving blocks.

TABULAR STATEMENT OF SUPPLY CONTRACTS.

No.	Date.	Contractor.	Description.
	1890.		
1249	Aug. 7	J. T. Springman & Son.....	Lamp-posts, man-hole irons.
1251	Aug. 9	W. T. Galliher & Bro	Lumber.
1252	Aug. 9	E. L. Dent	Miscellaneous castings.
1255	Aug. 11	Jeanette Blum	Dry goods.
1257	Aug. 8	H. I. Gregory	Tinware.
1258	Aug. 12	Ramsey & Bisbee	Blank forms and printing.
1259	Aug. 11	E. G. Wheeler	Hardware.
1260	Aug. 11	do	Plumbers' material.
1261	Aug. 11	do	Telegraph and telephone supplies.
1262	Aug. 13	H. McShane & Co.....	Plumbers' material.
1263	Aug. 13	Z. D. Gilman	Drugs.
1264	Aug. 13	Royce & Marean	Telegraph and telephone supplies.
1265	Aug. 14	C. C. Carroll	Fresh meat and corned beef.
1266	Aug. 14	J. B. Bryan & Bro	Groceries.
1268	Aug. 14	R. Leitch & Son	Plumbers' material.
1269	Aug. 15	E. Morrison	Stationery.
1271	Aug. 18	Wm. Ballantyne & Son	Do.
1272	Aug. 18	do	Schoolbooks.
1273	Aug. 16	Libbey, Bittinger & Miller	Lumber.
1275	Aug. 16	V. B. Johnson	Fuel.
1276	Aug. 13	W. J. C. Dulany	Schoolbooks.
1277	Aug. 13	do	Stationery.
1278	Aug. 13	do	Hardware.
1279	Aug. 19	Myers & Loving	Forage.
1280	Aug. 19	do	Groceries.
1281	Aug. 20	J. E. Chapman	Fuel.
1282	Aug. 20	B. Rich & Sons	Boots and shoes.
1283	Aug. 20	do	Dry goods.
1292	Aug. 12	Vacuum Oil Company	Glass, paints and oils.
1293	Aug. 25	Mayfield & Heiston	Fuel.
1295	Aug. 23	F. P. May & Co	Hardware.
1296	Aug. 25	E. G. Wheeler	Saddlery.
1297	Aug. 18	Great Falls Ice Company	Ice.
1298	Aug. 28	C. Becker	Saddlery.
1299	Aug. 28	B. S. Adams	Blank forms and printing.
1300	Aug. 28	R. Cohen	Boots and shoes.
1303	Aug. 23	Woodward & Lothrop	Groceries.
1304	Aug. 23	do	Stationery.
1305	Aug. 23	do	Furniture.
1306	Aug. 23	do	Dry goods.
1311	Sept. 9	J. A. Baker	Plumbers' material.
1313	Sept. 11	M. W. Beveridge	Furniture.
1314	Sept. 11	do	Tinware.
1323	Sept. 8	W. H. Butler	Glass, paints, and varnish.
1334	Sept. 18	F. Miller	Do.
1336	Aug. 15	The Law Reporter Company	Blank forms and printing.
1337	Sept. 23	The Linotype Company	Do.
1338	Sept. 13	Frank Hume	Groceries.
1347	Sept. 25	M. W. Galt & Co	Do.
1351	Sept. 30	W. F. Hewitt	Forage.
1365	Oct. 10	R. J. Earnshaw	Do.
1366	Oct. 10	J. L. Barbour & Son	Groceries.
1367	Oct. 9	Lansburgh & Bro	Dry goods.
1369	Sept. 13	W. B. Moses	Furniture.
1372	Sept. 19	Shenahan, Reilly & Co	Glass, paints, and varnish.
1399	Oct. 3	T. W. Smith	Lumber.
	1891.		
1459	June 10	J. T. Springman & Son.....	Lamp-posts and miscellaneous castings.

TABULAR STATEMENT OF MISCELLANEOUS CONTRACTS.

No.	Date.	Contractor.	Description.
1890.			
1250	Aug. 8	Springman & Bro.....	Haul cast-iron pipe, casting valves, etc.
1253	Aug. 9	E. L. Dent	Furnish 50 fire hydrants.
1274	Aug. 14	G. W. Knox.....	Haul cast-iron pipe, valves, castings.
1284	Aug. 19	Wheeler Reflector and Light Company.	Furnish and maintain oil lamps.
1286	Aug. 22	Shepherd & Hurley.....	Furnish 50 street hydrants.
1289	Aug. 20	McNeal Pipe and Foundry Company.	Furnish water-pipe and special casting.
1291	Aug. 20	United States Electric Light Co.	Furnish and maintain electric street lighting.
1301	Aug. 30	F. M. Draney	Remove garbage.
1302	Sept. 3	H. J. McLaughlin	Lay and put down, asholithic, granolithic, and Schillinger pavements.
1308	Sept. 5	W. E. Hodge	Cleaning alleys.
1309	Sept. 8	J. Richardson	Construct cement house.
1310	Sept. 8	George Drew & Son	Lay Portland cement concrete pavement.
1312	Sept. 10	P. McCartney	Construct brick school building, M street between First and New Jersey avenue.
1327	Sept. 13	J. M. Dunn	Construct brick school building on Jefferson street, Anacostia.
1339	Sept. 15	Georgetown Gas Light Co.....	Erect new lamps; supply gas for street lamps.
1340	Sept. 25	H. I. Gregory	Smead dry-closet system in school on M street, between New Jersey avenue and First.
1341	Sept. 25	do	Smead dry-closet system in school on Jefferson street, Anacostia.
1343	Sept. 24	J. H. Howlett	Construct additional story to Sixth police precinct.
1345	Sept. 26	J. R. Young	Construct additional story to Fourth police precinct.
1368	Oct. 11	A. W. Sweeney.....	Construct new ward at Washington Asylum.
1374	Oct. 13	W. F. Kerby & Bro	Construct brick school building on Eleventh street, between G and I streets, SE.
1375	Oct. 20	C. T. Carter & Co	Hardware.
1376	Oct. 20	do	Tinware.
1378	Oct. 20	E. J. Fitzgibbon.....	Construct walls and gates around Arthur School.
1379	Oct. 21	Haliday & Richardson.....	Construct cell building for police court.
1388	Oct. 23	Washington Gas Light Co.....	Erect new lamps and supply gas for street lamps.
1393	Nov. 26	J. R. Young	Construct stable for No. 8 police precinct station.
1394	Nov. 29	Haliday & Richardson	Addition to workhouse.
1395	Dec. 2	J. L. Parsons.....	Construct school building on Thirteenth street between V and W.
1896	Dec. 11	W. F. Kerby & Bro	Construct school building on P street, between North Capitol and First streets, NW.
1398	Dec. 13	J. R. Young.....	Construct stable for Fifth police precinct station.
1401	Dec. 19	H. I. Gregory	Furnish Smead dry-closet system in school on Thirteenth street between V and W.
1891.			
1402	Jan. 26	A. W. Sweeney	Construct truck house, Fourteenth street and Ohio avenue.
1403	Jan. 27	J. H. Howlett	Construct school building on N street between Twenty-seventh and Twenty-eighth streets.
1405	Feb. 10	T. P. Morgan	Dredge James Creek Canal.
1415	Feb. 20	La France Fire Engine Co.....	Furnish two extension fire-ladder trucks and fire escapes.
1417	Feb. 18	H. I. Gregory	Furnish Smead's dry-closet system, school, N, between Twenty-seventh and Twenty-eighth streets.
1418	Feb. 24	Gamewell Fire Alarm Telegraph Co.	Construct police signal patrol system for Eighth precinct.
1420	Mar. 4	D. J. Howell	Furnish index map of District of Columbia, outside of boundary, etc.
1425	Apr. 18	Wheeler Reflector and Light Co.	Furnish street lanterns.
1429	Apr. 16	J. R. Young.....	Construct building for dispensary institution, Fifteenth street and Ohio avenue.
1432	May 7	C. A. Baker.....	Construct plank sidewalks in Langdon Park.
1434	May 9	School Furnishing Co.....	Furnish school desks and chairs.
1437	May 8	Globe Furniture Co.....	Furnish teachers' desks and tables.
1441	May 9	W. F. Kerby & Bro.....	Construct school building on Seventh street, between Pennsylvania avenue and C street, SE.
1445	May 23	J. H. Howlett	Construct school building on P street, near Seventh street, NW.
1446	May 29	G. Richardson	Lay and put down carbonized-stone sidewalk.
1447	June 2	H. I. Gregory	Furnish Smead's dry-closet system at High School on Seventh street SE.
1448	June 2	do	Furnish Smead's dry-closet system in school on P street, near Seventh street, NW.
1449	May 26	P. Frawley	Grade space for bathing beach.

TABULAR STATEMENT OF SEWERS LAID UNDER CONTRACT.

Contract work.--Appropriation for main and pipe sewers.

[Contracts: No. 1267 and 1385, with Andrew Gleeson; No. 1267, with James McCandlish; No. 1381, with M. F. Talty; No. 1383, with H. L. Cranford.]

Contract No.	Location.	Size of sewer.	Length of sewer.	Price per linear foot.	Excavation.		Brick masonry.		Concrete masonry.		Lumber left in trench.	Cost of work.	Extra work.	Amount paid contractor.	Cost of material A.	Cost of material B.
					Excess.	De-ficit.	Ex-cess.	De-ficit.	Ex-cess.	De-ficit.						
1267	F street NW., between Twenty-sixth and Twenty-seventh	24	484.3	\$1.40							\$8.10	\$681.14	\$99.73	\$660.87	\$60.00	\$938.65
	Water street SW., crossing K.	24	132.7	1.40							18.94	203.06	3.27	142.33	84.00	122.42
	B street SE., between Eleventh and Twelfth.	24	372.2	1.40			\$30.00					546.09	7.79	532.28	21.60	355.29
1385	Fourteenth street NW., between Rhode Island avenue and P.	(*)	414.95	4.98	\$4.49		6.12					2,089.06	14.86	1,930.06	173.86	2.56
	Ninth street SE., between M and N.	(*)	638.80	3.75	25.94		17.31				52.39	2,491.14	260.34	2,366.15	385.33	
	Ninth street SE., between N and O.	(†)	587.45	4.16	12.41	\$25.99		\$5.57			10.99	2,435.63	100.24	2,217.47	318.40	152.21
1287	Eighteenth street NW., between F and Pennsylvania avenue	(†)	601.80	4.16	91.88		11.28					2,606.65	5.83	2,332.62	279.86	71.06
	Rhode Island avenue NW., between Eighth and Columbia.	(†)	600.00	4.16	4.78		4.06				2.22	2,507.06	14.11	2,160.37	360.80	76.35
	First street SE., North Carolina avenue to D.	(†)	745.60	4.16	29.75		13.83				19.96	3,165.24	66.35	2,815.27	416.32	95.68
1381	North Carolina avenue SE., between New Jersey avenue and First.	(†)	556.10	4.16	78.06		33.85				447.18	2,872.47	20.89	2,544.04	349.32	68.04
	L street SE., between Fourth and Sixth and across Reservation No. 16.	(†)	2,027.90	4.76		85.06		29.12				9,538.02	5.52	8,422.26	1,101.28	242.34
	K street NW., between North Capitol and Fourth.	(†)	1,598.00	6.79	81.44		97.37		\$1.62		* 163.29	11,194.14	156.89	10,441.03	910.00	
1383	L street NE., between Sixth and Florida avenue.	(§)	1,099.50	7.95	2,089.87		174.26				1,022.54	12,027.69	122.24	11,033.45	1,116.48	219.96
	Fourteenth street SE., between Pennsylvania avenue and river	(||)														

* Brick, 2.5 by 1.75 feet. † Brick, 2.75 by 4.125 feet. ‡ Brick, 3 by 4.5 feet. § Brick, 4 by 5 feet. || Concrete, 5.5 feet diameter.

Cost of material A; material furnished by District of Columbia and charged to contractor.

Cost of material B; material furnished by District of Columbia.

Owing to the noncompletion of the final measurement under contract No. 1270, with John J. Cudmore, the cost of inspection can not be obtained.

Basins constructed.—Main and pipe sewers.

[Contractor, P. Maloney; contract No. 1256.]

Location.	No.	Contract rate.	Cost of connecting.	Cost of contract work.	Cost of extra work.	Amount paid contractor.	Cost of material A.	Cost of material B.
NORTHWEST.								
Florida avenue and R street, northwest corner	1	\$52.70	\$13.26	\$65.96	.....	\$61.43	\$4.53	\$2.73
Florida avenue and Seaton street, northwest corner	1	52.70	36.04	88.74	.....	78.06	10.69	7.42
Hancock circle, south side	1	52.70	42.84	95.54	.....	83.02	12.52	8.82
New Hampshire avenue and U street, southwest corner	1	52.70	30.60	83.30	.....	74.08	9.22	6.30
New Hampshire avenue and U street, northeast corner	1	52.70	29.92	82.62	.....	73.59	9.03	6.16
O street, between Fourth and Fifth streets	1	52.70	13.60	66.30	.....	61.69	4.61	2.80
First and O streets, northwest corner	1	52.70	8.84	61.54	.....	58.21	3.33	1.82
First and O streets, southeast corner	1	52.70	12.92	65.62	.....	61.18	4.44	2.66
Fourth and R streets, northwest corner	1	52.70	20.40	73.10	.....	66.65	6.45	4.20
Fourth and R streets, northeast corner	1	52.70	8.16	60.86	.....	57.71	3.15	1.68
Fifth and R streets, northwest corner	1	52.70	43.52	96.22	\$1.78	85.29	12.71	8.96
Seventh street and Rhode Island avenue, northwest corner	1	52.70	8.16	60.86	3.01	60.72	8.15	1.68
Twelfth and V streets, northwest corner	1	52.70	6.12	58.82	.....	56.23	2.59	1.26
Twelfth and S streets, northwest corner	1	52.70	5.10	57.80	.....	55.48	2.32	1.05
Twelfth and S streets, southeast corner	1	52.70	8.16	60.86	.....	57.72	3.14	1.68
Sixteenth and U streets, northeast corner	1	52.70	6.12	58.82	3.38	59.61	2.59	1.26
Seventeenth and T streets, southwest corner	1	52.70	59.16	111.86	.....	94.93	16.93	12.18
Seventeenth and U streets, northwest corner	1	52.70	19.04	71.74	.....	65.65	6.09	3.92
Seventeenth and U streets, northeast corner	1	52.70	10.20	62.90	.....	59.19	3.71	2.10
Seventeenth and V streets, northeast corner	1	52.70	12.92	65.62	.....	61.18	4.44	2.66
Thirty-third and R streets, northwest corner	1	52.70	10.20	62.90	.....	59.19	3.71	2.10
Thirty-fourth and Q streets, northwest corner	1	52.70	9.52	62.22	.....	58.71	3.51	1.96
Thirty-fifth and R streets, northwest corner	1	52.70	55.08	107.78	.....	91.96	15.82	11.34
Thirty-fifth and T streets, northeast corner	1	52.70	12.24	64.94	.....	60.69	4.25	2.52
SOUTHWEST.								
Delaware avenue and H street, northwest corner	1	52.70	7.14	59.84	.....	56.97	2.87	1.47
Delaware avenue and H street, southwest corner	1	52.70	6.12	58.82	.....	56.23	2.59	1.26
Eighth and K streets, northwest corner	1	52.70	2.04	54.74	.....	53.25	1.49	.42
Thirteenth-and-a-half and D streets, northeast corner	1	52.70	8.84	61.54	.....	58.21	3.33	1.82
NORTHEAST.								
Massachusetts avenue and Tenth street, northeast corner	1	52.70	17.34	70.04	.....	64.42	5.62	3.57
Maryland avenue and Elliott street, northwest corner	1	52.70	20.40	73.10	.....	66.65	6.45	4.20
Maryland avenue and G street, southwest corner	1	52.70	29.92	82.62	.....	73.60	9.02	6.16
Tennessee avenue and F street, southeast corner	1	52.60	38.76	91.46	.....	80.05	11.41	7.98
Tennessee avenue and F street, southwest corner	1	52.70	10.20	62.90	4.02	63.22	3.70	2.10

NORTHEAST.

G street, between Sixth and Seventh streets	2	52.70	21.08	126.48	.....	118.90	7.58	4.34
Eighth and D streets, southeast corner	1	52.70	1.36	54.06	.....	52.75	1.31	.28
Ninth and C streets, northeast corner	1	52.70	25.16	77.86	.....	70.12	7.74	5.18
Ninth and D streets, southeast corner	1	52.70	68.34	121.04	.....	101.64	19.40	14.07
Ninth and F streets, northeast corner	1	52.70	4.08	56.78	.....	54.74	2.04	.84
Eleventh and Maryland avenue, southeast corner	1	52.70	24.82	77.52	.....	69.88	7.64	5.11
Twelfth and F streets, southeast corner	1	52.70	18.36	71.06	2.07	67.23	5.90	3.78
Fourteenth street and Maryland avenue, northwest corner	1	52.70	114.24	166.94	.....	135.14	31.80	23.52
Fourteenth street and Maryland avenue, southwest corner	1	52.70	8.84	61.54	31.64	89.85	3.33	1.82
Fourteenth street and Tennessee avenue, southwest corner	1	52.70	27.54	80.24	.....	71.86	8.38	5.67
SOUTHEAST.								
Seventh and L streets, northwest corner	1	52.70	8.16	60.86	.....	57.72	3.14	1.68
Tenth and B streets, northwest corner	1	52.70	10.20	62.90	.....	59.20	3.70	2.10
Tenth and D streets, northwest corner	1	52.70	12.24	64.94	.....	60.69	4.25	2.52
Tenth and D streets, northeast corner	1	52.70	26.52	79.22	.....	71.12	8.10	5.46
Tenth street and South Carolina avenue, northwest corner	1	52.70	23.46	76.16	.....	68.88	7.28	4.83
Extra work due to excavation for basins the construction of which was afterward abandoned	.....	.....	.....	.....	7.32	7.32	.....	.....
Total	.....	2,582.30	1,017.28	3,599.58	53.22	3,331.80	321.00	209.44

Cost of material A; material furnished by District of Columbia and charged to contractor.

Cost of material B; material furnished by District of Columbia.

Owing to the noncompletion of the final measurement under contract No. 1270, with John J. Cudmore, the cost of inspection can not be obtained.

[Contract: No. 1267, with James McCandlish; No. 1270, with John J. Cudmore; No. 1382, with Henry L. Cranford; No. 1385, with Andrew Gleeson; No. 1386, with Andrew Gleeson; No. 1387, with James McCandlish; No. 1389, with B. J. Coyle.]

No. of con- tract.	Location.	Size of sewer	Length of sewer.	Price per linear foot.	Excavation.		Brick ma- sonry.		Concrete masonry.		Lumber left in trench.	Cost of work.	Extra work.	Amount paid con- tractor.	Cost of mate- rial A.	Cost of mate- rial B.	Cost of inspec- tion.	Total cost.
					Ex- cess.	Deficit.	Ex- cess.	De- ficit.	Ex- cess.	De- ficit.								
1270	R st. NW., between North Capitol and 1st	In s. 12	707.8	\$0.92	.....	\$14.93	.....	\$7.02	.....	.....	.....	\$629.22	.....	\$548.52	\$80.70	\$108.92	\$97.17	\$833.31
	U st. NW., between 35th and 36th	12	573.7	.92	\$40.01	.....	\$11.30	.....	.....	.....	.....	579.11	.....	507.11	72.00	84.37	87.40	750.88
	Howard ave., between Cen-ter and 17th sts	12	777.8	.92	.....	2.52	.....	1.03	.....	.....	.....	712.02	.....	628.02	84.00	116.94	109.40	938.36
	Massachusetts ave., be-tween 22d and 23d sts....	12	343.2	.92	2.00	.....	.....	.....	.....	.....	.....	317.74	.....	279.34	38.40	50.70	48.50	416.94
	Piney Branch road, be-tween Sheridan ave. and Park st.....	12	222.5	.92	.....	3.18	.....	1.83	.....	.....	.....	199.69	.....	178.06	21.63	35.52	31.00	266.21
	17th st. NW., between Park and Laurel aves.....	12	597.1	.92	.....	17.05	.....	24.43	.....	.....	.....	507.85	.....	409.45	98.40	94.14	79.32	631.31
	Wilson st. NW., between 4th and 5th	12	312.5	.92	3.36	.....	2.41	.....	.....	.....	.....	293.54	.....	271.94	21.60	55.26	45.90	394.70
	Alley west of 14th st. ex-tended, between Colum-bia ave. and Binney st....	12	550.1	.92	.....	1.07	.....	2.38	.....	.....	.....	502.64	.....	474.35	28.29	78.42	76.59	657.65
	R st. NW., between North Capitol and 1st	12 } 15 }	1.5 799.1	.92 } .96 }	.....	25.92	.....	5.73	.....	.....	\$0.96	737.82	.....	634.92	102.90	200.82	123.70	1,062.34
	Columbia ave. NW., be-tween 18th st. and Cham-plain ave	18 } 15 }	6.0 260.0	1.09 } .96 }	5.40	.....	3.55	.....	.....	.....	8.40	273.49	.....	243.25	30.24	62.82	44.30	380.61
	Columbia ave. NW., from 14th st. west to alley	15	193.5	.96	19.46	.....	5.85	.....	.....	.....	1.06	212.13	.....	142.19	69.94	52.23	34.84	299.20
	Piney Branch road, be-tween Howard and Sheri-dan aves	15	246.5	.96	3.36	.....	.....	0.07	.....	.....	.....	239.93	.....	214.01	25.92	63.75	40.00	343.68
	18th st. NW., between Wyoming and Columbia aves	18 } 12 } 15 }	1,464.0 1.5 1.5	1.09 } .92 } .96 }	.....	2.39	.....	0.19	.....	.....	10.92	1,604.48	.....	1,407.92	196.56	506.67	278.45	2,389.60
	R st. NE., between North Capitol st. and Lincoln ave	18 } 15 }	132.4 3.0	1.09 } .96 }	13.54	.....	8.80	.....	.....	.....	.....	169.47	.....	148.32	21.15	42.57	27.94	239.98
	Piney Branch road, from Howard ave. northward..	21	393.7	1.39	.....	.71	.....	1.31	.....	.....	.....	548.10	.....	477.95	70.15	233.34	103.00	884.44

1267	24	24.8	1.40	.....	.....	34.72	.....	29.98	4.74	.....	4.57	39.29
14th st. road at Spring road.												
Irving st. NW., from	24	942.9	1.40	.....	.....	.....	.....	1,160.62	165.60	898.49	293.20	2,517.91
Brightwood ave. to 8th st.												
R st. NE., between Lincoln	24	290.0	1.40	.....	.....	402.68	.....	352.28	50.40	273.92	90.49	777.09
ave and 1st st.												
Massachusetts ave. NW.,	24	149.4	1.40	.....	.....	220.44	.....	274.31	22.80	141.36	57.78	496.25
between 22d and 23d sts.,												
Bladensburg road, crossing	24	46.2	1.40	.....	.....	63.02	.....	85.64	11.61	.....	12.78	110.03
H st.												
Center st. NW., between	24	109.2	1.40	.....	.....	151.22	.....	136.71	16.14	133.68	37.75	324.28
Road and Oak sts.												
Piney Branch road, be-	24	760.7	1.40	.....	.....	1,056.47	.....	1,014.50	116.64	731.88	245.50	2,108.52
tween Howard and Lau-												
rel aves.												
Lincoln ave. between Flor-	(*)	694.45	4.98	.....	4.77	3,503.04	.....	3,202.65	314.46	8.54	464.60	3,990.25
ida ave. and R st.												
14th st. road, between Oak	(†)	604.70	5.50	.....	.....	3,316.65	.....	3,238.17	230.88	1.62	456.00	3,916.67
st. and Spring road				9.20	.....	7,008.40	.....	8,083.05	624.91	.....	1,146.70	9,854.66
Rock Creek Valley	(†)	1,610.9	4.61	.....	345.01	2,646.47	.....	2,360.73	306.87	143.26	370.40	3,181.26
Bladensburg road.	(†)	622.7	4.25	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson st., between Fil-												
more and Madison sts.,												
Anacostia.	(‡)	1,359.5	6.42	78.86	.....	9,175.81	463.39	8,523.16	753.60	10.23	1,225.25	10,512.24
Blocks 2 and 3, Trinidad,												
and crossing M st.	(§)	451.09	9.30	.....	.....	4,180.36	.....	2,902.48	1,469.40	.....	576.00	4,947.88
Eckington. ....	(||)	440.19	12.30	.....	1,039.41	4,362.88	7.43	3,928.77	772.80	127.34	635.10	5,464.01
Total. ....		.....	.....	204.24	1,452.19	44,959.68	2,721.45	41,858.40	5,822.73	4,254.79	6,843.63	58,779.55

* Brick, 2.50 by 3.75 feet.
† Brick, 2.75 by 4.125 feet.
‡ Brick, 3.25 by 4.875 feet.
§ Concrete 7.5 feet in diameter.
|| Concrete 8 feet in diameter.

Cost of material A. Material furnished by District of Columbia and charged to contractor.

Cost of material B. Material furnished by District of Columbia.

Basins constructed.—Construction of suburban sewers.

[Contractor, P. Maloney. Contract No. 1256.]

Location.	No.	Contract rate.	Cost of connect- ing.	Cost of contract work.	Cost of extra work.	Amount paid con- tractor.	Cost of materials A.	Cost of materials B.	Cost of inspec- tion.	Total cost.
NORTHWEST.										
Brightwood avenue and Bismarck street, northwest corner	1	\$52.70	\$18.36	\$71.06	.....	\$64.99	\$6.07	\$3.78	\$10.13	\$84.97
Brightwood avenue and Irving street, northwest corner	1	52.70	16.32	69.02	.....	63.64	5.38	3.36	9.79	82.17
Champlain avenue, east side	1	52.70	10.20	62.90	.....	59.54	3.36	2.10	8.79	73.79
Florida avenue and Larch streets, northeast corner	1	52.70	3.40	55.93	.....	54.81	1.12	.66	7.66	64.25
Florida avenue and R street, northeast corner	1	52.70	2.72	55.42	.....	54.52	.90	.56	7.57	63.55
Maple avenue and Juniper street, northeast corner	1	52.70	10.20	62.90	.....	59.53	3.37	2.10	8.79	73.79
Maple avenue and Larch street, northeast corner	1	52.70	19.72	72.42	.....	65.91	6.51	4.06	10.35	86.83
North Capitol and Q streets, northwest corner	1	52.70	52.02	104.72	.....	87.56	17.16	10.71	15.62	131.05
North Capitol street and Truxton Circle	1	52.70	2.04	54.74	.....	54.07	.67	.42	7.46	62.62
Spruce and Linden streets, southeast corner	1	52.70	15.64	68.34	.....	63.18	5.16	3.22	9.68	81.24
First street and Florida avenue, northwest corner	1	52.70	14.96	67.66	.....	62.73	4.93	3.08	9.58	80.32
First street and Florida avenue, northeast corner	1	52.70	15.64	68.34	.....	63.18	5.16	3.22	9.68	81.24
First and R streets, northeast corner	1	52.70	17.34	70.04	.....	64.32	5.72	3.57	9.96	83.57
First and R streets, northeast corner	1	52.70	21.76	74.36	.....	67.18	7.18	4.48	10.67	89.51
First and R streets, northwest corner	1	52.70	7.14	59.84	.....	57.49	2.35	1.40	8.29	69.53
Thirteenth and Princeton streets, northwest corner	1	52.70	31.28	83.98	.....	73.66	10.32	6.34	12.20	102.52
Fourteenth street and Kenesaw avenue, northwest corner	1	52.70	23.12	75.82	.....	68.19	7.63	4.76	10.90	91.48
Fourteenth street and Kenesaw avenue, southwest corner	1	52.70	37.40	90.10	.....	77.76	12.34	7.70	13.23	111.03
Eighteenth street and California avenue, northwest corner	1	52.70	19.38	72.08	.....	65.69	6.39	3.92	10.29	86.29
Eighteenth street and California avenue, northeast corner	1	52.70	19.04	71.74	.....	65.46	6.28	3.92	10.24	85.90
Eighteenth street and California avenue, southwest corner	1	52.70	17.00	69.70	.....	64.09	5.61	3.50	9.90	83.10
Eighteenth and Vernon streets, northwest corner	1	52.70	22.44	75.14	.....	67.74	7.40	4.62	10.79	90.55
Eighteenth and Vernon streets, northeast corner	1	52.70	19.72	72.42	.....	65.91	6.51	4.06	10.35	86.83
Eighteenth street and Wyoming avenue, southwest corner	1	52.70	17.68	70.38	.....	64.55	5.83	3.64	10.01	84.03
NORTHEAST.										
Florida avenue and North Capitol street, northeast corner	1	52.70	1.86	54.06	\$21.55	75.16	.45	.28	10.27	86.16
Florida avenue and Fourth street, northeast corner	1	52.70	47.60	100.30	.....	84.60	15.70	9.80	14.90	125.00
Florida avenue and Sixth street, northwest corner	1	52.70	22.44	75.14	.....	67.74	7.40	4.62	10.80	90.56
Total	27	1,422.90	505.92	1,928.55	21.55	1,783.20	166.90	103.88	277.90	2,331.88

Cost of material A. Material furnished by District of Columbia and charged to contractor.
 Cost of material B. Material furnished by District of Columbia.

Contract work.—Appropriation for replacing obstructed sewers.

[Contract: No. 1270, with J. J. Cudmore; No. 1267, with James McCandlish.]

No. of con- tract.	Location.	Size of sewer	Length of sewer.	Price per linear foot.	Excavation.		Brick ma- sonry.		Concrete masonry.		Lumber left in trench.	Cost of work.	Extra work.	Amount paid con- tractor.	Cost of mate- rial A.	Cost of mate- rial B.	Cost of inspec- tion.	Total cost.
					Ex- cess.	De- ficit.	Ex- cess.	De- ficit.	Ex- cess.	De- ficit.								
1270	Fourth st. SE., between East Capi- tol st. and Pennsylvania ave.....	12 15	6.0 1,042.2	.92 .96	\$69.52	.....	\$29.07	.....	\$2.33	.....	.....	\$1,106.95	\$5.25	\$987.92	\$124.28	\$263.35	\$570.20	\$1,945.75
1267	Fourth st. SE. between B st. and Pennsylvania ave.....	24	273.7	1.40	.....	.....	.....	.....	.....	.....	\$5.78	388.96	2.25	340.81	50.40	262.36	270.96	924.53
	T st. NW., between Tenth and Twelfth	24	473.5	1.40	.....	.....	.....	.....	.....	.....	6.22	669.12	10.20	594.00	85.32	452.00	468.50	1,599.82
	Total				69.52	.....	29.07	.....	2.33	.....	12.00	2,165.20	17.70	1,922.73	260.00	977.76	1,309.66	4,470.10

Cost of material A. Material furnished by District of Columbia and charged to contractor.

Cost of material B. Material furnished by District of Columbia.

WORK DONE BY DAY'S LABOR UNDER VARIOUS SEWER APPROPRIATIONS.

Appropriation for main and pipe sewers.

Location.	Pipe sewers laid (length in feet).					Manholes.	Branches.	Basins.	Cost of labor.	Cost of material.	Total cost.
	6-inch.	8-inch.	12-inch.	15-inch.	18-inch.	21-inch.					
G street NW., near building line of Fifteenth street.								1	\$30.99	\$38.25	\$69.14
K street NW., between First and Fourth streets.									123.12	46.95	*170.07
K street NW., between Fourteenth and Fifteenth streets, south side.			12			465	2	17	776.12	459.43	1,235.55
L street SW., between Four-and-a-half and Sixth streets, south side.									4.25	1.20	*5.45
M street NW., between Thirty-fourth and Thirty-fifth streets.			147				1	2	72.76	4.90	†77.76
R street NW., between Third and Fourth streets, north side.									103.75	64.20	167.95
Lawrence street NW., between Eighth and Ninth streets.								1	31.12	18.70	49.82
North Capitol and E streets, southeast corner.			27					1	47.87	44.03	91.90
New Hampshire avenue and Washington Circle.									30.35	11.98	*42.33
Pennsylvania avenue NW., between Seventeenth and Eighteenth streets, north side.		9		3	282	96	2	12	578.02	314.61	892.63
Pennsylvania avenue NW., between Seventeenth and Eighteenth streets.									70.35	2.36	*72.71
Rhode Island avenue NW., between Eighth and Tenth streets.									40.50	26.16	*66.66
Rhode Island avenue and P street NW.									50.90	30.36	*80.96
First and D streets SW., southwest corner.				6				1	42.75	37.95	80.70
First and L streets SW., at sand yard.									30.75	65.27	*96.02
First and D streets SE.									62.49	65	63.14
Second street SW., between C and D streets.									4.24	1.16	*5.40
Sixth and L, Eleventh and K streets SW.									19.75	1.63	\$21.38
Eighth and H streets NW., northwest corner.		33						1	25.24	16.26	41.50
Eighth street and Rhode Island avenue NW., southwest corner.			21						39.32	18.49	57.81
Eighth street NE., between B and C streets.		75						2	38.73	54.28	93.01
Eleventh and B streets SE.			6					1	31.50	39.72	71.22
Twelfth and B streets SE.			6					1	33.87	39.99	73.86
Fourteenth street and Pierce Place NW., southwest corner.		36						1	32.75	14.84	47.59
Eighteenth street NW., between G street and Pennsylvania avenue.									77.85	17.46	*95.31
Eighteenth street and Florida avenue NW.								1	69.50	48.93	118.43
Twenty-second street and Pennsylvania avenue NW.									10.15	10.65	*20.80
Thirty-second and U streets NW.	9						1		78.37	29.99	†108.36
Thirty-fourth street NW., between U and Thirty-second streets.			27		249		2	19	498.94	278.39	777.33
Thirty-fifth and U streets NW., northwest and northeast corners.		72						2	138.75	98.36	237.11
Square—											
79.								1	29.56	18.50	48.06
134.								1	20.50	20.76	41.26
279.	60		9						1,150.43	509.40	1,659.83
370.		129		192	502		3	34	132.13	75.74	207.87
426.		15					1	5	20.18	12.19	32.37
445.			24					1	29.25	26.00	55.25
517.	12	3	6		308		1	24	479.37	247.44	726.81

587.....	21	1	1	37.30	37.81	75.11
749.....			1	19.50	17.54	37.04
856.....			1	17.12	16.78	33.90
856.....				1.18		*1.18
898.....		1		51.26	36.28	87.54
936.....	24	3	2	383.69	179.73	563.42
996.....	90	3		78.61	62.68	141.29
Alley between French and S streets, near west building line of Ninth street.....			1	21.88	23.29	45.17
Street running north and south between Fifteenth and Sixteenth streets, Massachusetts and Rhode Island avenues NW.....	12			33.69	22.90	56.59
Various streets.....	9		1	39.75	8.77	††48.52
Do.....				46.00		*46.00
Total.....	81	21	29	5,786.15	3,152.96	8,939.11

* Concrete repairs over contract work.
† Repaving over sewers.
‡ Building fence.
§ Repairing trenches.
|| Building flushing tank.
** Connecting basin; material furnished by surface department.
†† Tapping sewer for inspection.

Appropriation for replacing obstructed sewers.

Location.	Pipe sewers relaid (length in feet).						Manholes.	Branches.	Basins.	Cost of labor.	Cost of material.	Total cost.	Total in feet relaid.
	6-inch.	12-inch.	15-inch.	18-inch.	21-inch.	24-inch.							
Massachusetts avenue, between Twelfth and Thirteenth streets NW		360					3	12		\$357.67	\$176.49	\$534.16	362
Pennsylvania avenue, between Third and Fourth streets SE							4	19		628.48	395.00	1,023.48	479
East Capitol street, between Tenth and Eleventh streets		165			30	51		9		185.54	70.38	255.92	165
B street, between Eleventh and Twelfth streets SE		120						19		303.68	87.24	390.90	290
C street, between Second and Third streets SE		57						18		265.61	75.99	341.60	325
F street, between Four-and-a-half and Sixth and Sixth between E and F streets SW		195		3			4	3		373.71	156.66	530.37	198
T street, between Tenth and Twelfth streets NW										8.36	3.11	11.47	(*)
G street, between North Capitol and First streets W		129						3		153.07	45.55	198.62	150
K street, between Sixteenth and Seventeenth streets NW		870					5	24		1,099.19	372.56	1,471.75	887
O street, between Fifteenth and Sixteenth streets NW	15	222						14		484.64	122.45	607.09	416
R street, between New Jersey avenue and Fifth street NW		3								21.57	.42	21.99	3
Third street, between East Capitol and A streets N		345					3	12		282.30	156.26	448.56	354
Second street, between C and D streets SE		21					3	12		463.30	284.40	747.70	373
Second street, between C street and Pennsylvania ave. SE		66					2	3		67.48	87.18	154.66	400
Fourth street, between East Capitol and Pennsylvania avenue SE. (east side)										8.39	4.73	13.12	(*)
Fourth street, between Pennsylvania avenue and B street SE. (west side)										4.18	2.36	6.54	(*)
Fourth street, between C and E streets SE		57		42				9		612.40	156.13	768.53	701
Four-and-a-half street, between G and H streets SW	18	266					3	16		383.02	152.21	535.23	303
Four-and-a-half street, between M and N streets SW	30	369		60				22		417.42	224.66	642.08	459
Fifth street, between Q and R streets NW	12	570						20		1,217.73	266.83	1,484.56	929
Sixth street, between O and P streets NW	15	54								314.68	74.86	389.54	301
Eleventh street, between Virginia avenue and C street SW				324				11		362.01	166.96	528.97	338
Eleventh street, between South Carolina avenue and C street SE	48	213					2	15		346.27	157.21	503.48	363
Eleventh street, between B and C streets SE	18	99						22		457.16	99.89	557.05	468
Sixteenth street, between K and L streets NW. (east side)				81				4		243.83	58.71	302.54	81
Sixteenth street, between K and L streets NW. (west side)					501		2	12		1,155.25	346.25	1,501.50	508
Sixteenth street crossing K street, and south side K crossing Sixteenth street NW						69	1			125.48	122.74	248.22	129
Seventeenth street, between K and L streets NW						456		6		928.98	674.01	1,602.99	465
Seventeenth street, between I and K streets NW		6		414				21		731.11	245.91	977.02	420
Nineteenth street, between Q and R streets NW	48			96	309			21		823.29	320.47	1,143.76	477
Square 420	15	222		158			1	13		346.94	112.75	459.69	163
Square 630								15		288.06	95.50	383.56	237
Total	219	4,409	1,735	1,176	99	507	33	355		13,460.78	5,325.87	18,786.65	10,744

* Concrete repairs over contract work.

Appropriation for construction of suburban sewers.

Location.	Pipe sewers laid (length in feet).							Manholes.	Branches.	Basins.	Cost of labor.	Cost of material.	Total cost.
	6-inch.	8-inch.	12-inch.	15-inch.	18-inch.	21-inch.	24-inch.						
Lincoln avenue and North Capitol street.....		44								1	\$37.81	\$50.32	\$88.13
Lincoln avenue and R street.....											34.75	13.40	*48.15
Elm street, between Linden and Harwood avenues.....			393					2	31	1	288.91	190.25	479.16
Larch street, between Florida and Maple avenues, and Maple avenue, between Florida avenue and Linden street.....	30		339	33	150			3	20		774.73	334.22	1,108.95
Intersection Trumbull street and alley near Mott's school building.....			9							1	24.37	23.55	47.92
Superior street.....											57.41		†57.41
First street, R street, and R street between First street and Florida avenue NW.....			6	291		39		4	14		374.85	246.22	621.07
Twelfth street, between Florida avenue and N street NE.....		4						1		1	51.98	61.47	113.45
Bladensburg road, north of Graceland Cemetery.....							6			1	34.62	44.88	79.50
Rock Creek Valley.....											348.10		†348.10
Various streets.....											38.00		†38.00
Total.....	30	48	747	324	150	39	6	10	65	5	2,065.53	964.31	3,029.84

* Concrete repairs over contract work.

† Covering sewer.

‡ Tapping sewers for inspection.

TABULAR STATEMENT OF SEWERS

PERMIT SEWERS.

No. of order.	Location.	Pipe sewers laid (length in feet).						6½ feet diam-eter, con-crete.	Man holes built.	Basins built.	Branches used.
		6-inch.	8-inch.	12-inch.	15-inch.	18-inch.	24-inch.				
122	Connecticut avenue, between H and I streets, NW.	.....	.....	49	.....	.....	.....	.....	.....	.....	1
87	Delaware avenue, between B and C streets, NE.	.....	.....	70	.....	.....	.....	.....	.....	.....	2
15	Florida avenue, between Massachusetts avenue and R street, NW.	.....	78	.....	.....	.....	.....	.....	1	.....	3
30	Florida avenue, between North Capitol and First streets.	.....	72	.....	.....	.....	.....	.....	.....	.....	5
49	Florida avenue, between Linden and Larch streets.	.....	.....	49	.....	.....	.....	.....	1	.....	2
08	Florida avenue, between Bohrer and Juniper streets.	.....	.....	180	.....	.....	.....	.....	1	.....	7
103	Florida avenue, between Linden and Larch streets.	.....	59	.....	.....	.....	.....	.....	1	.....	4
116	Florida avenue, between Fourth and Fifth streets, NW.	.....	.....	18	.....	.....	.....	.....	.....	.....	1
132	Lincoln avenue, between Truxton Circle and R street.	.....	130	.....	.....	.....	.....	.....	2	.....	5
143	Massachusetts avenue, between First and Second streets, NE.	.....	.....	315	.....	.....	.....	.....	2	.....	15
119	Maryland avenue, between Second and Third streets, NE.	.....	.....	99	.....	.....	.....	.....	.....	.....	5
34	New Hampshire avenue, between L and M streets, NW.	.....	66	.....	.....	.....	.....	.....	1	.....	3
2	New Jersey avenue, between Ivy and E streets, SE.	.....	.....	167	.....	.....	.....	.....	1	.....	4
89	New York avenue, between Seventeenth and Eighteenth streets, NW.	.....	.....	245	.....	.....	.....	.....	1	.....	7
99	New York avenue, between Seventeenth and Eighteenth streets, NW.	.....	.....	60	.....	.....	.....	.....	.....	.....	3
61	Vermont avenue, between Q and R streets, NW.	.....	.....	45	.....	.....	.....	.....	.....	.....	1
81	Vermont avenue, between N and O streets, NW.	.....	.....	89	.....	.....	.....	.....	1	.....	2
44	Hopkins street, between O and P streets, NW.	.....	91	.....	.....	.....	.....	.....	.....	.....	2
19	Larch street, between Florida and Maple avenues, NW.	.....	.....	.....	.....	81	.....	.....	.....	.....	6
08	Le Roy Place, Washington Heights.....	.....	.....	58	.....	.....	.....	.....	.....	.....	2
16	Patterson street, between North Capitol and First, M, and N streets, NE.	.....	.....	36	.....	.....	.....	.....	.....	.....	3
112	Roanoke street, between Thirteenth and Fourteenth streets, extended.	.....	.....	642	.....	.....	.....	.....	4	.....	34
58	Sherman street, between Eighteenth and Nineteenth and Q and R streets.	.....	.....	135	.....	.....	.....	.....	.....	.....	6
3	Spruce street, between Linden street and Harewood avenue.	.....	.....	240	.....	.....	.....	.....	1	.....	22
86	Spruce street, between Third and Fourth streets, NW.	.....	.....	114	.....	.....	.....	.....	1	.....	12
108	Warren street, between B and C streets, NE.	.....	.....	165	.....	.....	.....	.....	1	.....	13
75	A street, between Eighth and Ninth streets, NE.	.....	.....	66	.....	.....	.....	.....	.....	.....	3
123	A street, between Eleventh and Twelfth streets, NE.	.....	.....	21	.....	.....	.....	.....	.....	.....	1
129	B street, between First street and Delaware avenue, SW.	.....	.....	209	.....	.....	.....	.....	.....	.....	11
82	{ B street, between Eleventh and Twelfth streets, NE. Eleventh street, between A and B streets, NE.	.....	230	.....	.....	.....	.....	.....	4	.....	7
11	C street, between Second and Third streets, NW.	.....	.....	67½	.....	.....	.....	.....	1	.....	3
65	C street, between Seventh and Eighth streets, NE.	.....	.....	34	.....	.....	.....	.....	.....	.....	2
147	C street, between Seventh and Eighth streets, NE.	.....	.....	14	.....	.....	.....	.....	.....	.....	1
51	{ C street, between First and Arthur Place, NW. First street, between B and C streets, NW }	3	.....	127	.....	.....	.....	.....	1	.....	4
35	D street, between South Capitol street and Delaware avenue.	.....	.....	101	.....	.....	.....	.....	.....	.....	2
55	Crossing D street, near Delaware avenue, SW.	.....	.....	50	.....	.....	.....	.....	1	.....	1

LAID UNDER THE PERMIT SYSTEM.

PERMIT SEWERS

Estimated cost of work.	Amount of deposit.	Cost to District of Columbia.	Cost to property owners.	Total cost.	Amount returned.	For whom done.	Overseer.	Date of completion.
\$70.00	\$35.00	\$30.08	\$30.09	\$60.17	\$4.91	F. L. Denny, secretary.	D. Thomas ..	Apr. 10, 1891
112.00	56.00	40.96	40.96	81.92	15.04	A. P. Clark, jr ...	Wilson	Dec. 1, 1890
247.50	123.75	61.56	61.55	123.11	62.20	Alex. H. Semmes	Condon	Aug. 6, 1890
100.00	50.00	35.24	35.24	70.48	14.76	L. M. Saunders ..	do	Sept. 21, 1890
121.00	60.50	59.68	59.68	119.36	82	Bailey & Duehay	do	Sept. 25, 1890
250.00	125.00	105.92	105.92	211.84	19.08	W. R. Coon	do	Oct. 29, 1890
120.00	60.00	51.97	51.98	103.95	8.02	J. J. Brooks	do	Jan. 15, 1891
30.00	15.00	13.06	13.07	26.13	1.93	D. B. Gottwalls ..	Ward	Mar. 19, 1891
174.00	87.00	81.87	81.88	163.75	5.12	Jno. L. Paine	Condon	May 12, 1891
416.00	208.00	198.17	198.18	396.35	9.82	F. T. Browning ..	Ward	June 17, 1891
130.00	65.00	51.57	51.57	103.14	13.43	Barnes & Weaver	do	Apr. 8, 1891
100.00	50.00	46.63	46.64	93.27	3.36	A. F. Dunnington.	Condon	Sept. 18, 1890
210.00	105.00	104.91	104.92	209.83	.08	Jno. Miller	do	July 19, 1890
312.50	196.25	196.24	196.25	392.49	.....	Geo. E. Lemon ..	do	Dec. 22, 1890
78.00	39.00	38.77	38.76	77.53	.24	do	do	Dec. 23, 1890
120.00	60.00	34.42	34.42	68.84	25.58	Eugene Wilson ..	do	Oct. 14, 1890
142.00	71.00	51.33	51.33	102.66	19.67	Hill & Johnston ..	Ward	Nov. 29, 1890
140.00	70.00	50.71	50.71	101.42	19.29	E. F. Meline	Condon	June 26, 1891
143.50	71.75	60.47	60.48	120.95	11.27	W. H. Barnes	do	Aug. 11, 1890
110.00	55.00	30.06	30.06	60.12	24.94	L. A. Tuttle	do	Oct. 14, 1890
50.00	25.00	23.99	23.99	47.98	1.01	H. L. Rust	do	Aug. 5, 1890
810.00	405.00	382.66	382.66	765.32	22.34	Swormstedt & Bradley.	Ward	May 25, 1891
170.00	85.00	68.30	68.30	136.60	16.70	Jno. F. Waggonman.	Condon	Oct. 9, 1890
325.00	162.50	146.45	146.44	292.89	16.06	W. Z. Partello ...	Thomas	July 22, 1890
156.00	78.00	75.09	75.08	150.17	2.92	W. J. Lewis	Ward	Dec. 4, 1890
240.00	120.00	81.93	81.94	163.87	38.06	A. Fisher	do	Feb. 12, 1891
100.00	50.00	42.12	42.12	84.24	7.88	C. A. Didden	Condon	Nov. 20, 1890
40.00	20.00	14.98	14.98	29.96	5.02	Edw. H. Fowler ..	Ward	Apr. 21, 1891
300.00	150.00	137.10	137.09	274.19	12.91	C. O. Moore, president	do	May 13, 1891
335.00	167.50	145.57	145.57	291.14	21.93	E. J. Hannan	Condon	Nov. 16, 1890
100.00	50.00	49.77	49.78	99.55	.22	Jas. J. Clark	Thomas	July 31, 1890
45.00	22.50	22.10	22.10	44.20	.40	Geo. Kern.	Condon	Oct. 25, 1890
20.00	10.00	9.56	9.55	19.11	.45	Chas. Gessford ..	Ward	June 30, 1891
182.00	91.00	83.33	83.32	166.65	7.68	B. H. Warner & Co.	Condon	Sept. 30, 1890
140.00	70.00	70.00	70.00	140.00	.....	Springman & Bro.	do	Sept. 3, 1890
130.00	65.00	50.65	50.66	101.31	14.34	B. Diggins	Ward	Oct. 15, 1890

PERMIT SEWERS—Continued.

No. of order.	Location.	Pipe sewers laid (length in feet).						6½ feet diam-eter, con-crete.	Man holes built.	Basins built.	Branches used.
		6-inch.	8-inch.	12-inch.	15-inch.	18-inch.	24-inch.				
113	D street, between Eighth and Ninth streets, SE.			162					1		5
20	E street, between Third and Fourth streets, NE.			68					1		4
30	E street, between Sixth and Seventh streets, NE.			90					1		5
95	E street, between Third and Fourth streets, NE.		8								1
104	E street, between Third and Fourth streets, NE.			21							1
124	F street, between Fourteenth and Fifteenth streets, NW.			100					1		2
57	G street, between Eleventh and Twelfth streets, SE.			59							4
137	G street, between Third and Fourth streets, NE.			210					1		7
91	I street, between Sixth and Seventh streets, NE.			76							3
18	K street, between Sixth and Seventh streets, SE.		56						1		4
97	K street, between Fifth and Sixth streets, NE.			21							1
125	K street, between Delaware avenue and First street, SW.		102						1		7
17	M street, between M-street bridge and Twenty-eighth street, NW.		53						1		1
88½	{ N street, between North Capitol and First street, E. North Capitol, between M and N streets. }			204					2		0
105	N street, between North Capitol and First streets, W.		121						1		3
128	North Capitol street, between New York avenue and Hanover Place.			90		3			1		4
40	O street, between Thirty-third and Thirty-fourth streets, NW.			72					1		3
8	Q street, between Twentieth and Twenty-first streets, NW.			28					1		1
32	{ Q street, between Twenty-second and Twenty-third streets, NW. Twenty-third street, between Sheridan Circle and Rock Creek. }			480					4		15
111	S street, between Seventh and Eighth streets, NW.		46						1		2
88	W street, between Tenth and Eleventh streets, NW.		71								4
10	Sixth street, between E and F streets, NE.			167					1		4
69	Sixth street, between N and O streets, NW.		61								2
114	Sixth street, between E and F streets, NE.		39								3
25	Eighth street, between D and E streets, NW.			224					2		8
140	Eighth street, between C street and Massachusetts avenue, NE.			171					1		8
5	Ninth street, between E and F streets, NE.			38					1		1
131	Ninth street, between North Carolina avenue and B street, SE.			84					1		5
48	Eleventh street, between Public square and B street, NE.			99					1		4
78	Twelfth street, between Florida avenue and M street, NE.			264					1		8
115	Twelfth street, between Florida avenue and N street, NE.			300	81				2		14
133	Twelfth street extended and block 2, Trinidad, NE.		88	103	162				4		10
100	{ Twelfth street, between Maryland avenue and G street, NE. F street, between Eleventh and Twelfth streets, NE. }			198					1		6
4	Thirteenth street, between W street and Florida avenue, NW.			21							1
83	{ Thirteenth street, between E and F streets, NW. F street, between Twelfth and Thirteenth streets, NW. }	24		174	288				2		8

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 443

PERMIT SEWERS—Continued.

Estimated cost of work.	Amount of deposit.	Cost to District of Columbia.	Cost to property owners.	Total cost.	Amount returned.	For whom done.	Overseer.	Date of completion.
\$208.00	\$104.00	\$99.59	\$99.58	\$199.17	\$4.42	Henry Rabe.....	Ward.....	Mar. 11, 1891
142.00	71.00	62.20	62.20	124.40	8.80	P. C. Palmer.....	Condon.....	Aug. 12, 1890
136.50	68.25	58.18	58.17	116.35	10.08	S. W. Curridan.....	do.....	Sept. 22, 1890
20.00	10.00	6.75	6.75	13.50	3.25	P. C. Palmer.....	Ward.....	Dec. 30, 1890
30.00	15.00	13.26	13.26	26.52	1.74	do.....	Condon.....	Jan. 13, 1891
180.00	90.00	69.96	69.96	139.92	20.04	N. W. Burchell.....	do.....	Apr. 25, 1891
130.00	65.00	39.97	39.96	79.93	25.04	F. W. Lusby.....	Ward.....	Oct. 24, 1890
270.00	135.00	116.47	116.46	232.93	18.54	R. S. Davis.....	Condon.....	May 23, 1891
98.00	49.00	41.16	41.17	82.33	7.83	Arthur Cowsill.....	Ward.....	Dec. 30, 1890
100.00	50.00	39.17	39.16	78.33	10.84	Wm. Yost & Bro.....	Thomas.....	Aug. 11, 1890
30.00	15.00	13.04	13.04	26.08	1.96	G. R. Foss.....	Ward.....	Jan. 5, 1891
150.00	75.00	68.43	68.43	136.86	6.57	O. T. Thompson, attorney for W. A. and J. G. Thompson.	Condon.....	Apr. 27, 1891
134.00	67.00	50.34	50.33	100.67	16.67	H. B. F. McFarland.	do.....	Sept. 9, 1890
304.00	152.00	150.50	150.50	301.00	1.50	E. Woltz.....	Wilson.....	Dec. 12, 1890
156.00	78.00	69.24	69.24	138.48	8.76	C. G. Thorn.....	Condon.....	Jan. 14, 1891
180.00	90.00	86.00	85.99	171.99	4.01	Rust & Hungerford.	Ward.....	May 5, 1891
124.00	62.00	61.01	61.02	122.03	.98	E. T. Lydane.....	Condon.....	Sept. 17, 1890
72.00	36.00	34.78	34.78	69.56	1.22	R. Parker.....	Thomas.....	July 25, 1890
662.50	381.25	368.13	368.13	736.26	13.12	Albert Gleason.....	Condon.....	Sept. 19, 1890
80.00	40.00	39.26	39.25	78.51	.75	J. R. Brooks.....	Ward.....	Feb. 24, 1891
94.00	47.00	39.76	39.77	79.53	7.23	Geo. W. Cook.....	do.....	Dec. 5, 1890
234.00	117.00	116.95	116.94	233.89	.06	S. H. Walker.....	Condon.....	July 30, 1890
86.00	43.00	39.44	39.45	78.89	3.55	Mary O. Bergman.	do.....	Oct. 27, 1890
86.00	43.00	23.26	23.26	46.52	19.74	Thos. Reidy.....	Ward.....	Mar. 11, 1891
392.00	196.00	194.59	194.59	389.18	1.41	Chr. Heurich.....	Condon.....	Aug. 27, 1890
234.00	117.00	111.64	111.65	223.29	5.35	Swormstedt & Bradley.	Ward.....	May 30, 1891
68.00	34.00	33.86	33.86	67.72	.14	Lucy C. Byrne.....	Condon.....	July 21, 1890
130.00	65.00	60.29	60.28	120.57	4.72	Edw. Landvoight.....	Ward.....	May 11, 1891
146.00	73.00	60.89	60.89	121.78	12.11	E. Warren.....	Condon.....	Sept. 24, 1890
405.00	202.50	202.21	202.21	404.42	.29	E. J. Anderson.....	do.....	Nov. 24, 1890
494.00	247.00	243.69	243.69	487.38	3.31	R. H. Willett.....	Ward.....	Mar. 19, 1891
586.00	293.00	238.89	238.90	477.79	54.10	Jno. H. Lewis.....	Condon.....	May 19, 1891
273.00	136.50	136.32	136.33	272.65	.17	H. A. Getz.....	do.....	Jan. 12, 1891
28.00	14.00	13.60	13.60	27.20	.40	O. L. Wolfstein.....	Thomas.....	July 23, 1890
873.00	436.50	435.47	435.47	870.94	1.03	M. W. Beveridge.....	Condon.....	Feb. 14, 1891

PERMIT SEWERS—Continued.

No. of order.	Location.	Pipe sewers laid (length in feet).						6½ feet diam-eter, con-crete.	Man holes built.	Basins built.	Branches used.
		6-inch.	8-inch.	12-inch.	15-inch.	18-inch.	24-inch.				
85	Fourteenth street, near K street, NW...			297					2		7
109	Fourteenth street, between B and C streets, SW.			99					1		5
60	Fifteenth street, between Gales and E streets, NE.			183	45				2		12
6	Twentieth street, between Massachusetts avenue and Q street, NW.			27							1
79	Twenty-second street, between M and N streets, NW.			344					2		22
	Square 70										
110	Thirty-first street, between U and V streets, NW.			249					1		4
	U street, between Thirtieth and Thirty-first streets, NW.										
14	Square 28		50								4
135	Square 43			183					1		10
50	Square 50			141					1	1	4
117	Square 73			66							6
24	Square 77			315					2		18
56	Square 91			69					1		5
70	Square 96		47								4
13	Square 101		68						2		4
42	Square 117	6		177					2		21
127	Square 73			24							1
63	Square 150			66							10
84	Square 152		30	57					1		3
106	Square 170			138					1		6
29	Square 182			27							2
31	Square 182			84					1		8
48	Square 205			480					3		35
67	Square 206		34								5
22	Square 238			287					1		25
73	Square 316		58						1		2
136	Square 388			183					1		28
134	Square 435			45							5
54	Square 445			111					1		4
102	Square 482			735					6		53
47	Square 498			122					2		7
1	Square 502		132						2		6
93	Square 503			183					3		15
139	Square 503		74						1		10
71	Square 511		25								2
107	Square 518			24							3
59	Square 551			150					2		14
130	Square 553			111							14
37	Square 557			61							8
38	Square 564		25								2
76	Square 567		27								3
118	Square 567			42							4
21	Square 618			21					1		3
52	Square 620			210					3	1	20
62	Square 620			105					1		12
145	Square 621		36	166					2		12
12	Square 635		50	233					2		23
96	Square south of 635		6	246					4	1	27
43	Square 672			42							3
30	Square 721			666					6		65
41	Square 721		18								3
97	Square 749			123							15
77	Square 779		111						2		6
27	Square 829		77						1		4
121	Square 858		8								1
92	Square 861			228					1		21
98	Square 861			87					1		10
126	Square 861			186					1		24
142	Square 861			189					1		20

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 445

PERMIT SEWERS—Continued,

Estimated cost of work.	Amount of deposit.	Cost to District of Columbia.	Cost to property owners.	Total cost.	Amount returned.	For whom done.	Overseer.	Date of completion.
\$636.00	\$318.00	\$250.85	\$250.86	\$501.71	\$67.14	Jno. B. Brady....	Condon.....	Dec. 15, 1890
136.00	68.00	68.00	68.00	136.00	.....	Jas. Alman.....	Ward.....	Feb. 17, 1891
364.00	182.00	147.77	147.76	295.53	34.24	D. Birtwell.....	Condon.....	Oct. 20, 1890
45.00	22.50	19.50	19.51	39.01	2.99	Addison & Larcombe.	Thomas.....	July 23, 1890
460.00	230.00	226.15	226.15	452.30	3.85	J. H. Grant.....	Ward.....	June 26, 1891
364.00	182.00	147.25	147.25	294.50	34.75	Jno. T. Mitchell..	do.....	Feb. 20, 1891
68.00	34.00	30.79	30.79	61.58	3.21	Jas. H. Grant....	Thomas.....	Aug. 2, 1890
240.00	120.00	119.42	119.42	238.84	.58	O. T. Smith.....	Ward.....	June 24, 1891
220.00	110.00	99.50	99.50	199.00	10.50	W. B. Moses.....	Condon.....	June 26, 1891
91.00	45.50	43.45	43.55	87.10	1.95	Wescott, Wilcox & Co.	Ward.....	Mar. 23, 1891
400.00	200.00	198.26	198.25	396.51	1.75	C. F. Smith.....	Condon.....	Nov. 21, 1890
100.00	50.00	47.99	47.99	95.98	2.01	Theo. A. Harding	Ward.....	Jan. 16, 1891
75.00	37.50	25.47	25.47	50.94	12.03	Jas. Sheehy.....	do.....	Oct. 28, 1890
144.00	72.00	61.92	61.93	123.85	10.07	Jos. H. Hunter...	Thomas.....	Aug. 7, 1890
278.00	139.00	111.54	111.53	223.07	27.47	H. B. Nailor <i>et al</i>	Condon.....	Oct. 11, 1890
35.00	17.50	14.04	14.04	28.08	3.46	Wescott & Wilcox	Ward.....	Apr. 30, 1891
85.00	42.50	30.55	30.54	61.09	11.96	J. C. Davidson...	Condon.....	Oct. 14, 1890
125.00	62.50	57.73	57.73	115.46	4.77	Mr. Kitch.....	Ward.....	Nov. 20, 1890
510.00	255.00	174.66	174.66	349.32	80.34	Geo. E. Lemon...	Condon.....	Jan. 23, 1891
37.50	18.75	18.47	18.46	36.93	.29	W. E. Brown.....	do.....	Aug. 28, 1890
105.00	52.50	50.54	50.54	101.08	1.96	Addison & Larcombe.	do.....	Aug. 28, 1890
673.00	336.50	301.41	301.42	602.83	35.08	W. W. McCullough.	do.....	Oct. 9, 1890
100.00	50.00	21.21	21.21	42.42	28.79	M. Sells.....	Ward.....	Oct. 25, 1890
367.50	183.75	181.64	181.64	363.28	2.11	S. S. Shedd & Bro.	Condon.....	Aug. 16, 1890
94.00	47.00	45.62	45.61	91.23	1.39	D. S. Williamson.	Ward.....	Nov. 13, 1890
234.00	117.00	113.34	113.34	226.68	3.66	Thos. P. Stephenson.	Condon.....	May 26, 1891
60.00	30.00	26.58	26.58	53.16	3.42	E. Temple & A. J. Fisher.	do.....	May 23, 1891
166.00	83.00	80.12	80.13	160.25	2.87	W. Z. Partello...	Ward.....	Oct. 8, 1890
1,030.00	515.00	513.96	513.96	1,027.92	1.04	T. F. Schneider..	Condon.....	May 6, 1890
200.00	100.00	79.18	79.19	158.37	20.81	J. F. Cullinane...	do.....	Sept. 24, 1890
206.00	103.00	93.02	93.01	186.03	9.99	E. J. Hannan.....	do.....	July 16, 1890
264.00	132.00	128.28	128.28	256.56	3.72	Glenn Brown <i>et al</i> .	Ward.....	Jan. 16, 1891
116.00	58.00	52.21	52.22	104.43	5.78	C. N. Thompson...	do.....	May 26, 1891
40.00	20.00	12.97	12.98	25.95	7.02	J. H. Hollidge...	do.....	Oct. 28, 1890
40.00	20.00	11.86	11.85	23.71	8.15	A. Behrend.....	do.....	Feb. 2, 1891
200.00	100.00	95.12	95.13	190.25	4.87	Jos. Busden.....	Condon.....	Oct. 20, 1890
150.00	75.00	62.41	62.42	124.83	12.58	Chas. Smithson..	Ward.....	May 5, 1891
100.00	50.00	32.16	32.16	64.32	17.84	D. Riordan.....	Condon.....	Sept. 19, 1890
35.00	17.50	15.60	15.60	31.20	1.90	Deveraux & Gaghan.	do.....	Sept. 20, 1890
50.00	25.00	13.16	13.16	26.32	11.84	Jno. T. Clark....	Ward.....	Dec. 1, 1890
60.00	30.00	26.04	26.04	52.08	3.96	do.....	do.....	Apr. 7, 1891
55.00	27.50	26.41	26.41	52.82	1.09	E. F. Davis.....	Condon.....	Aug. 28, 1890
340.00	170.00	162.56	162.55	325.11	7.45	M. C. Stone.....	Ward.....	Sept. 30, 1890
140.00	76.70	76.69	76.70	153.39	.....	....do.....	do.....	Oct. 17, 1890
273.00	136.50	132.93	132.93	265.86	3.57	Chas. W. Handy...	do.....	June 29, 1891
364.00	182.00	178.84	178.83	357.67	3.17	Jesse Shreeve...	Condon.....	Aug. 4, 1890
414.00	267.00	256.60	256.60	513.20	10.40	Jno. W. Shiles...	Ward.....	Dec. 30, 1890
70.00	35.00	27.68	27.68	55.36	7.32	H. L. Rust.....	do.....	Oct. 3, 1890
972.00	486.00	443.56	443.57	887.13	42.43	W. H. Barnes <i>et al</i> .	Condon.....	Sept. 22, 1890
28.00	14.00	9.02	9.01	18.03	4.99	Emmons & King..	do.....	Sept. 22, 1890
162.00	81.00	78.61	78.61	157.22	2.39	Chas. A. Elliot...	Ward.....	Jan. 8, 1891
185.00	92.50	77.13	77.14	154.27	15.36	D. B. Groff.....	do.....	Dec. 3, 1890
95.00	47.50	45.67	45.67	91.34	1.83	W. Donaldson...	Condon.....	Aug. 29, 1890
18.00	9.00	5.48	5.47	10.95	3.53	Jno. Driscoll...	Ward.....	Apr. 15, 1891
312.00	156.00	150.01	150.02	300.03	5.98	A. A. Chapin...	do.....	Dec. 13, 1890
130.00	95.00	92.35	92.35	184.70	2.65	T. B. Crisp.....	do.....	Jan. 12, 1891
240.00	120.00	110.18	110.18	220.36	9.82	S. H. Walker.....	do.....	Apr. 28, 1891
280.00	140.00	112.35	112.34	224.69	27.66	F. M. Buckingham.	do.....	June 11, 1891

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PERMIT SEWERS—Continued.

No. of order.	Location.	Pipe sewers laid (length in feet).						6½ feet diam-eter, con-crete.	Man holes built.	Basins built.	Branches used.
		6-inch.	8-inch.	12-inch.	15-inch.	18-inch.	24-inch.				
74	Square 870		27								
7	Square 895			247					2		14
53	Square 936		44								1
23	Square 943			95					1		4
64	Square 950			186					1		9
90	Square 950			51							4
*80	Square 981			1, 171					7		44
72	Square 992		77						1		7
120	Square 1012			156					2		5
141	Square 1027			77							10
31	Block 3, Le Droit Park		38								4
9	Square 18, Georgetown		22								2
28	Square 57, Georgetown		79						2	1	8
†101	Edgewood							823.35	4		
‡45	D street, between Twelfth and Fourteenth streets, SE.				1,082				5		34
	Total	33	2,543	16,232½	1,922	81	3	823.35	156	4	1,187

Work performed under

26	G street, between Eleventh and Twelfth streets, SE.			80					1		7
15	N street, between North Capitol and First streets, west.			312					2		18
16	Pierce street, between North Capitol and First streets, west.			501					3		27
31	Fourth street, between N and O streets, NW.			309					2		11
19											
24	Block 2, Howard University subdivision	3		213					1		27
§1	Square 167								3		37
29	Square 172			423					3	2	33
21	Square 177			312	54				2		30
12	Square 210			321					3	1	39
18	Square 211			498					2	2	22
13	Square 280			326							
64	Square 535								1		18
25	Square 544			156					1		7
8	Square 551			204					1		
10	Square 551			66							
§5	Square 569										
§3	Square 570								2		19
7	Square 570			371							5
6	Square 620			48							14
22	Square 643		96	181					3		17
14	Square 719			204	3				2		20
23	Square 841			219					2		
§2	Square 870										
20	Square 878		291						1		36
	Total	3	387	4,750	57				35	5	387

*Performed under contract No. 1270, J. J. Cudmore, contractor.

†Performed under contract No. 1407, P. H. Sugrue, contractor.

‡Performed under contract No. 1270, J. J. Cudmore, contractor.

§ Work commenced during the fiscal year 1890; completed in the fiscal year 1891.

PERMIT SEWERS—Continued.

Estimated cost of work.	Amount of deposit.	Cost to District of Columbia.	Cost to property owners.	Total cost.	Amount returned.	For whom done.	Overseer.	Date of completion.
\$37.50	\$18.75	\$16.46	\$16.46	\$32.92	\$2.29	Geo. R. Repetti ..	Ward	Nov. 17, 1890
350.00	175.00	174.85	174.85	349.70	.15	S. Norment	Condon	July 25, 1890
62.50	31.25	25.16	25.16	50.32	6.09	J. R. Lamdin	Ward	Sept. 30, 1890
140.00	70.00	68.14	68.13	136.27	1.87	C. H. Gladden & P. Kennedy.	Condon	Aug. 30, 1890
274.00	137.00	107.02	107.03	214.05	29.97	E. Abner	Ward	Oct. 22, 1890
72.80	36.40	26.17	26.17	52.34	10.23	do.....	do.....	Dec. 22, 1890
1,500.00	750.00	673.69	673.69	1,347.38	76.31	W. J. Newton ...	Shomo & Wilson.	May 9, 1891
118.00	59.00	45.60	45.60	91.20	13.40	Chas. Gesford ...	Ward	Nov. 15, 1890
208.00	104.00	100.92	100.93	201.85	3.07	Sarah A. Barrick et al.	do.....	Apr. 21, 1891
130.00	65.00	44.45	44.45	88.90	20.55	Waters & Thompson.	do.....	June 18, 1891
75.00	37.50	17.93	17.94	35.87	19.56	F. H. Duehay ...	Condon	Sept. 19, 1890
30.00	15.00	14.90	14.90	29.80	.10	Emma C. Thecker	Thomas	July 27, 1890
250.00	125.00	86.62	86.62	173.24	38.38	Wm. H. Manogue	Condon	Sept. 16, 1890
7,990.00	3,995.00	3,791.76	3,791.76	7,583.52	203.24	Emmons & King.	Marks & Beach.	Sept. 5, 1891
2,172.00	1,086.00	941.89	941.88	1,883.77	144.12	A. Cary	Lamb	Oct. 29, 1890
39,797.30	20,085.35	18,156.99	18,157.03	36,314.02	1,928.32			

compulsory permit system.

\$140.00	.....	\$54.18	\$54.19	\$108.37	.....	Compulsory	Ward	May 13, 1891
468.00	.....	268.12	268.12	536.24	.....	.....do.....	Wilson	Dec. 13, 1890
710.00	.....	467.04	467.04	934.08	.....	.....do.....	Ward	Feb. 10, 1891
400.00	.....	188.38	188.38	376.76	.....	.....do.....	Condon & Lanigan.	June 30, 1891
275.00	.....	131.63	131.62	263.25	.....	.....do.....	Ward	May 23, 1891
.....	.....	5.52	5.52	11.04	.....	.....do.....	do.....	Sept. 25, 1890
540.00	.....	251.40	251.40	502.80	.....	.....do.....	Ward	June 5, 1891
500.00	.....	382.21	382.21	764.42	.....	.....do.....	do.....	June 26, 1891
454.00	.....	201.65	201.64	403.29	.....	.....do.....	Condon	Nov. 4, 1890
480.00	.....	327.12	327.11	654.23	.....	.....do.....	do.....	May 6, 1891
468.00	.....	240.03	240.04	480.07	.....	.....do.....	do.....	Jan. 20, 1891
.....	.....	5.58	5.59	11.17	.....	.....do.....	do.....	Oct. 15, 1890
215.00	.....	102.97	102.97	205.94	.....	.....do.....	Condon	May 7, 1891
266.50	.....	129.18	129.18	258.36	.....	.....do.....	do.....	Oct. 18, 1890
182.00	.....	49.57	49.58	99.15	.....	.....do.....	do.....	Oct. 21, 1890
.....	.....	11.31	11.32	22.63	.....	.....do.....	do.....	Aug. 1, 1890
.....	.....	12.23	12.23	24.46	.....	.....do.....	do.....	Oct. 4, 1890
500.00	.....	241.48	241.47	482.95	.....	.....do.....	Ward	Apr. 22, 1891
60.00	.....	27.17	27.17	54.34	.....	.....do.....	do.....	Oct. 17, 1890
362.00	.....	136.85	136.85	273.70	.....	.....do.....	do.....	Apr. 14, 1891
304.00	.....	143.83	143.84	287.67	.....	.....do.....	do.....	Nov. 4, 1890
262.00	.....	145.59	145.59	291.18	.....	.....do.....	do.....	Apr. 24, 1891
.....		3.35	3.35	6.70		do.....	do.....	Oct. 15, 1890
325.00		136.91	136.91	273.82		do.....	Ward	Mar. 9, 1891
6,911.56		3,663.30	3,663.32	7,326.62				

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Work performed at

No. of order.	Location.	Pipe sewer laid (length in feet).				Man-holes built.	Basins built.	Branches used.
		6-inch.	8-inch.	12-inch.	15-inch.			
4 and 14*	Brightwood avenue, Grant and Brightwood avenues.			9	6		2	
12.....	Florida avenue, between Fourth and Fifth streets NW.			3				1
23†.....	Massachusetts avenue, between First and Second streets NE.							
27, 28 and 21‡§†..	Along line of cable road.....			3	3			
22§.....	Bennings Road, between Eastern Branch and Abattoir Company's work.			2,601		8		
17.....	H street, between Fourth and Fifth streets NE., and Fifth street, between H and I streets NE.		208			3		5
5||.....	Sixth and G streets SE.....					1		
19.....	Seventh street extended (in front of No. 2122).				6			1
7, 9, 10, 16, and 26¶†.....	Various streets.....			27	12	1		3
8.....	Fourteenth and D streets NW.			15		1		
15.....	Fourteenth street, between B and C streets SW.	6	60					
1.....	Square 44.....		45			1		6
13.....	Square 93.....		68			1		1
3.....	Square 640.....		17					1
18.....	Square 725.....	21		3				1
2.....	Square 900.....	14		2				2
6.....	Square 981.....			99		1		
24 and 25†.	Various streets.....							
	Total.....	41	398	2,762	27	17	2	21

* Basins reconstructed.

† Removing manholes.

‡ Lowering basin connection.

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 449

whole cost to applicant.

Estimated cost.	Amount of deposit.	Cost to property owners.	Total cost.	Amount re-turned.	For whom done.	Overseer.	Date of completion.
\$60.00	\$60.00	\$52.13	\$52.13	\$7.87	The Judson Pneumatic Street R. R. Co.	Bolden and Boucher.	Jan. 27, 1891
6.00	6.00	5.90	5.90	.10	J. B. Lybrook	Condon	Jan. 15, 1891
30.00	30.00	30.00	30.00	.....	Kennedy & Davis	Lanigan	June 1, 1891
{ 150.00 500.00 }	{ 650.00	223.77	223.77	.....	Washington and Georgetown R. R. Co.	do .....	.....
3,526.20	3,526.20	2,756.25	2,756.25	.....	W. E. Clark	Condon .....	.....
260.00	260.00	220.76	220.76	39.24	J. S. Boss	Ward	Apr. 17, 1891
25.00	25.00	16.96	16.96	8.04	H. A. Griswold, president.	.....	.....
12.00	12.00	10.03	10.03	1.97	Anna M. Brodrect	Ward	Apr. 30, 1891
1,070.00	1,070.00	360.56	360.56	.....	The Eckington and Soldiers' Home R. R.	Boucher and Condon.	May 29, 1891
40.00	40.00	42.72	42.72	.....	A. M. Renshaw, manager.	Boucher	Dec. 12, 1890
94.00	94.00	68.30	68.30	25.70	James Alman	Ward	Feb. 14, 1891
90.00	90.00	66.98	66.98	23.02	J. C. Davidson	Wilson	July 23, 1890
90.00	90.00	88.50	88.50	1.50	William M. Poindexter	Ward	Jan. 31, 1891
24.00	24.00	23.25	23.25	.75	Deveraux & Gagen	Condon	July 24, 1890
28.30	28.30	14.23	14.23	14.07	J. W. Bartlett	Ward	Apr. 8, 1891
15.00	15.00	14.82	14.82	.18	J. C. Lotz	Condon	July 24, 1890
192.50	192.50	192.50	192.50	.....	W. J. Newton	Wilson	Apr. 9, 1891
45.00	45.00	44.49	44.49	.51	George White, president.	Lanigan	June 8, 1891
6,258.00	6,258.00	4,232.15	4,232.15	122.95			

§ Work not completed; balance forwarded into fiscal year 1892.

|| Manhole reconstructed.

¶ Includes deposit for surface work.

CHARACTER AND EXTENT OF STREET PAVEMENTS.

Character and extent of street pavements, July 1, 1891.

WASHINGTON.

Street.	From—	To—	Carriage way.							Remarks.	
			Width.	Asphalt or concrete.	Granite.	Wood.	Cobble and blue rock.	Macadam.	Gravel.		Unimproved.
			Feet.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	
North Capitol.....	B street north.....	C street north.....	50	2,790							Gravel from K to Boundary.
Do.....	C street north.....	Boundary.....	50	14,305						16,058	
South Capitol.....	B street south.....	M street south.....	50							26,284	
Do.....	M street south.....	N street south.....	50								
Do.....	N street south.....	River.....	50								
First street east.....	B street north.....	B street south.....	50	8,657				3,243		13,259	From M st. south to N st. 1,511 yards cobble bet. R. R. tracks.
Do.....	do.....							1,511			
Do.....	C street north.....	C street north.....	35	1,986							O. c. walk, curb and gutter, G to K street.
Do.....	C street north.....	K street north.....	35	5,616						3,629	
Do.....	K street north.....	Boundary.....	35								From B st. south to C st. O. c. walk, curb, and gutter, M to N.
Do.....	B street south.....	C street south.....	38								
Do.....	C street south.....	Canal.....	35	1,260	2,151					4,379	
Do.....	Canal.....	River.....	35							3,500	
First street west.....	Pennsylvania avenue.....	Indiana avenue.....	56 }								
Do.....	Indiana avenue.....	F street north.....	40 }		8,332			4,055			Cobble bet. R. R. tracks.
Do.....	G street north.....	H street north.....	32		1,427						
Do.....	H street north.....	I street north.....	32	700	535						Concrete from H to Defrees.
Do.....	I street north.....	K street north.....	32	1,191							
Do.....	K street north.....	Boundary street.....	32								Cobble bet. R. R. tracks.
Do.....	Pennsylvania avenue.....	Maryland avenue.....	53	4,861				1,133		11,022	
Do.....	Maryland avenue.....	M street south.....	35		17,920						O. c. walk, curb, and gutter, G. to L.
Do.....	M street south.....	N street south.....	34					2,314			
Do.....	N street south.....	River.....	35								O. c. walk, curb, and gutter, G. to L.
Second street east.....	Pennsylvania avenue.....	Maryland avenue.....	32	6,597						13,160	
Do.....	Maryland avenue.....	H street north.....	32	3,885						10,337	
Do.....	H street north.....	Boundary street.....	32								
Do.....	Pennsylvania avenue.....	D street south.....	32 }	4,906						3,416	
Do.....	D street south.....	Canal.....	35 }								O. c. walk, curb, and gutter, G. to L.
Do.....	Canal.....	River.....	35 }								
			32 }							2,099	4,389
											4,620

Second street west.....	Pennsylvania avenue.....	New Jersey avenue.....	40	10,423	3,693	.....	.....	.....	.....	.....	.....	32 feet wide bet. H and I.
Do.....	B street south.....	Maryland avenue.....	32	1,454	.....	.....	.....	.....	1,130	.....	.....	O. c. walk, curb, and gutter, from B to D.
Do.....	do.....	D street south.....	32	.....	.....	.....	.....	.....	.....	.....	2,836	.....
Do.....	D street south.....	River.....	32	1,725	.....	.....	.....	.....	5,686	.....	3,200	.....
Third street east.....	East Capitol.....	E street north.....	32	7,028	.....	.....	.....	.....	2,400	.....	.....	.....
Do.....	E street north.....	Boundary.....	32	1,498	.....	.....	.....	.....	.....	4,617	7,752	.....
Do.....	East Capitol.....	Pennsylvania avenue.....	32	3,521	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Pennsylvania avenue.....	C street south.....	32	987	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	C street south.....	D street south.....	32	.....	2,573	.....	.....	.....	.....	.....	.....	.....
Do.....	D street south.....	Virginia avenue.....	32	.....	5,030	.....	.....	.....	.....	.....	.....	.....
Do.....	Virginia avenue.....	L street south.....	32	.....	2,464	.....	.....	.....	800	.....	.....	O. c. walk, curb, and gutter.
Do.....	L street south.....	Georgia avenue.....	32	.....	.....	.....	.....	.....	4,461	.....	.....	.....
Do.....	Pennsylvania avenue.....	D street north.....	32	.....	4,230	.....	.....	.....	.....	.....	.....	.....
Third street west.....	D street north.....	New Jersey avenue.....	40	19,480	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	M street north.....	Boundary.....	40	.....	.....	.....	.....	.....	.....	.....	8,445	Resurfaced from D to K street in 1883.
Do.....	Pennsylvania avenue.....	B street south.....	40	.....	6,065	.....	.....	.....	.....	12,391	.....	O. c. walk, curb, and gutter, 1,900 feet.
Do.....	B street south.....	N street south.....	40	8,193	.....	.....	.....	.....	.....	.....	.....	.....
Fourth street east.....	East Capitol.....	C street north.....	35	6,438	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	C street north.....	Boundary.....	35	837	.....	.....	.....	.....	.....	.....	16,337	From G to M, east side im- proved.
Do.....	East Capitol.....	C street south.....	35	4,152	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	C street south.....	N street south.....	35	593	.....	.....	.....	.....	.....	16,760	.....	.....
Fourth street west.....	D street north.....	New York avenue.....	32	14,291	.....	.....	.....	.....	.....	3,968	.....	.....
Do.....	New York avenue.....	Boundary.....	32	.....	2,401	.....	.....	.....	.....	1,930	.....	.....
Do.....	O street north.....	Missouri avenue.....	70	4,575	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	D street north.....	P street south.....	55	6,836	.....	.....	.....	.....	.....	10,204	.....	.....
Do.....	Missouri avenue.....	C street north.....	40	4,833	27,413	.....	.....	.....	.....	.....	.....	.....
Fifth street east.....	East Capitol.....	K street north.....	40	4,876	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	C street north.....	Boundary.....	40	875	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	K street north.....	C street south.....	40	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	East Capitol.....	I street south.....	40	4,916	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	C street south.....	M street south.....	32	693	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	I street south.....	G street south.....	32	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	D street north.....	L street north.....	46	3,866	.....	.....	.....	.....	.....	1,370	.....	.....
Do.....	G street north.....	O street north.....	32	7,382	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	L street north.....	Boundary.....	32	5,666	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	O street north.....	H street north.....	32	7,559	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	East Capitol.....	Boundary.....	35	11,861	.....	.....	.....	.....	.....	.....	.....	.....
Sixth street east.....	H street north.....	Boundary.....	35	4,775	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Pennsylvania avenue.....	K street south.....	35	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	L street south.....	M street south.....	35	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Pennsylvania avenue.....	East Capitol.....	35	5,949	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	do.....	Louisiana avenue.....	60	3,244	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Louisiana avenue.....	F street north.....	32	4,300	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	F street north.....	G street north.....	32	.....	975	.....	.....	.....	.....	.....	.....	.....
Do.....	G street north.....	Massachusetts avenue.....	32	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Massachusetts avenue.....	New York avenue.....	35	6,895	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	New York avenue.....	Boundary.....	35	16,636	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Pennsylvania avenue.....	D street south.....	60	1,747	.....	.....	.....	.....	.....	15,653	.....	500 yds. cobble bet. R. R. t'ls.

Ninth street west (west side).	P street north	Boundary	51	6, 147			4, 800			Do.
Ninth street west (east side)	do	do	51	5, 130						Asphalt surface on cobble foundation from B to C.
Ninth street west	B street south	Water street	32	1, 454	7, 061			13, 830	2, 773	Gravel from East Capitol to I street.
Tenth street east	East Capitol	Boundary	32							O. c. walk, curb, and gutter.
Do	do	Pennsylvania avenue	32 }							Trap rock.
Do	Pennsylvania avenue	M street south	32 }							
Tenth street west	do	B street north	51		3, 103				4, 748	
Do	do	E street north	32	1, 544						
Do	D street north	F street north	32		1, 372					
Do	E street north	G street north	32	956						
Do	F street north	M street north	32	8, 296						3, 469 square yards paved since 1878.
Do	G street north		32							
Do			32							
Do	M street north		32	7, 876						Gravel from R to S street.
Do	R street north	Boundary	32	1, 992						
Do	D street south	Water street	32							
Do	B street south	Maryland avenue	32	2, 411			5, 000			
Eleventh street east	East Capitol	Boundary	32							
Do	Massachusetts avenue	Pennsylvania avenue	60						13, 083	
Do	Pennsylvania avenue	River	56		30, 148					
Eleventh street west	do	B street north	55							
Do	do	E street north	55	2, 500						
Do	E street north	F street north	55		1, 734					
Do	F street north	G street north	55		1, 214					
Do	G street north	I street north	55	4, 241						
Do	I street north	K street north	35	875						
Do	K street north	O street north	35		4, 326					
Do	O street north	R street north	35	3, 339						
Do	R street north	Boundary	35	6, 911					4, 349	
Do	B street south	Water	40		10, 511					
Twelfth street east	Lincoln Square	Boundary	32							
Do	do	River	32							
Twelfth street west	Pennsylvania avenue	Ohio avenue	40		3, 500					
Do	do	E street north	38	1, 292						
Do	E street north	F street north	38		1, 627					
Do	F street north	N street north	32	13, 039						
Do	N street north	Rhode Island avenue	32	4, 577						
Do	Rhode Island avenue	Boundary	32	11, 235						
Do	B street north	Water street	40		17, 406					
Thirteenth street east	East Capitol	Boundary	32							
Do	do	River	32							
Thirteenth street west	Pennsylvania avenue	E street north	40	685						
Do	E street north	F street north	40		1, 741					
Do	F street north	K street north	40	7, 772						
Do	B street north	Pennsylvania avenue	40	5, 582						
Thirteenth street west	K street north	Circle	32	8, 090						
										1, 760 square yards paved since 1879.
										5, 942 square yards paved since 1878.

Character and extent of street pavements July 1, 1891—Continued.

WASHINGTON—Continued.

Street.	From—	To—	Carriage way.						Remarks.	
			Width.	Asphalt or concrete.	Granite.	Wood.	Cobble and blue rock.	Macadam.		Gravel.	Unimproved.
			Feet.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.
Thirteenth street west....	Circle.....	Boundary.....	32	6,398						
Do.....	B street south.....	Maryland avenue.....	40	5,700						
Do.....	Maryland avenue.....	Water street.....	40							
Thirteen-and-a-half street west.	Pennsylvania avenue....	B street north.....	35					5,095		1,636
Do.....	B street south.....	Maryland avenue.....	32							
Fourteenth street east....	East Capitol.....	Boundary.....	35					4,291		
Do.....	do.....	River.....	32							
Fourteenth street west....	B street north.....	B street south.....	40		7,841					
Do.....	do.....	F street north.....	70		2,618					
Do.....	F street north.....	Thomas Circle.....		9,518						
Do.....	Thomas Circle.....	Boundary.....	70	16,655				4,004		
Do.....	B street south.....	Water street.....	70	32,782				8,024		
Fifteenth street east....	East Capitol.....	Boundary.....	40					6,764		
Do.....	do.....	River.....	32							
Fifteenth street west....	Pennsylvania avenue....	B street north.....	32							12,196
Do.....	do.....	New York avenue.....	43	7,012						13,796
Do.....	H street north.....	H street north.....	70	4,478				1,322		
Do.....	K street north.....	K street north.....	50 }	7,005						
Do.....	Rhode Island avenue....	Rhode Island avenue....	40 }							
Do.....	S street north.....	S street north.....	32	6,920						
Do.....	Pennsylvania avenue....	Boundary.....	32	7,516						
Fifteen-and-a-half street west.	Pennsylvania avenue....	H street north.....	32	4,059					2,806	
Do.....	do.....	do.....	40	1,997						
Sixteenth street east....	East Capitol.....	C street north.....								
Do.....	do.....	Kentucky avenue.....	32							5,973
Sixteenth street west....	H street north.....	Boundary street.....	32							8,782
Sixteen-and-a-half street west.	Pennsylvania avenue....	H street north.....	50	36,659						
Do.....	do.....	do.....	40	2,196						
Seventeenth street east....	East Capitol.....	C street north.....								
Do.....	do.....	River.....	32							4,196
Seventeenth street west....	B street north.....	K street north.....	32							12,089
Do.....	I street north.....	P street north.....	50	16,729				3,684		
Do.....	P street north.....	Q street north.....	32	12,698						
Do.....	do.....	do.....	32	1,763						

275 square yards cobble between railroad tracks.
Cobble between R. R. tracks.
Do.

Do.

Do.

Do.....	Q street north	R street north	32	1,874					1,600	O. c. walk, curb, and gutter.
Do.....	R street north	Boundary	32	2,946					4,076	O. c. walk, curb, and gutter from T to Boundary.
Eighteenth street east	East Capitol	C street north	32						4,196	
Do.....	do.....	Cemetery	32						7,556	
Eighteenth street west	B street north	E street north	32						3,751	
Do.....	E street north	New York avenue	32	1,095						
Do.....	New York avenue	Pennsylvania avenue	40	4,895						
Do.....	Pennsylvania avenue	K street north	38	4,741						
Do.....	K street north	L street north	32	1,431						
Do.....	L street north	P street north	32	7,584						
Do.....	P street north	Boundary	32	4,895						
Nineteenth street east	East Capitol street	C street north	32						3,649	
Do.....	do.....	Cemetery	32						4,196	
Nineteenth street west	B street north	New York avenue	32					1,028	8,676	Cobble west side of Rawlins Square.
Do.....	E street north	Pennsylvania avenue	40	6,421					3,644	
Do.....	Pennsylvania avenue	Dupont Circle	{ 40 }	2,409	8,799					{ Between Pa. av. and K st.,
Do.....	Du Pont Circle	T street north	{ 32 }	7,598						{ 40; between K and circle, 22.
Twentieth street east	East Capitol	C street north	30							
Do.....	do.....	Almshouse	32						4,196	
Twentieth street west	B street north	E street north	32						2,560	
Do.....	E street north	Pennsylvania avenue	32	6,039					3,662	
Do.....	Pennsylvania avenue	K street north	32	981	1,349					
Do.....	K street north	R street north	32	12,564						Granite from I to K street.
Do.....	R street north	Boundary	32							R to S, asphalt surface on cobble foundation.
Twenty-first street east	East Capitol street	C street north	32	1,985				800		
Do.....	do.....	B street south	32						4,176	
Do.....	B street north	E street north	32						2,560	
Do.....	E street north	Pennsylvania avenue	32	6,101					3,662	
Do.....	Pennsylvania avenue	K street north	32		1,395					
Do.....	K street north	Massachusetts avenue	32	10,892						
Do.....	Q street north	Hillyer street	32	956						
Do.....	Hillyer street	Boundary	32	2,381						
Twenty-second street east	East Capitol street	C street north	32							
Do.....	do.....	B street south	32						4,196	
Do.....	B street north	Virginia avenue	32						2,560	
Do.....	E street north	G street north	32						3,758	
Do.....	G street north	K street north	32	4,641						
Do.....	K street north	M street north	32	2,781						
Do.....	M street north	Boundary	32	5,480						
Do.....	East Capitol street	C street north	32						1,369	
Do.....	do.....	B street south	32							
Do.....	Virginia avenue	E street north	32							
Do.....	E street north	Upper Water	32						4,196	
Do.....	F street north	Pennsylvania avenue	32	1,425					2,560	
Do.....	Pennsylvania avenue	M street north	32	2,387					3,413	
Do.....	M street north	Rock Creek	32							
Do.....	East Capitol street	C street north	32						3,699	
Do.....	do.....	B street south	32						4,196	
Do.....			32						2,560	

Character and extent of street pavements, July 1, 1891—Continued.

WASHINGTON—Continued.

Street.	From—	To—	Carriage way.							Remarks.	
			Width.	Asphalt or concrete.	Granite.	Wood.	Cobble and blue rock.	Macadam.	Gravel.		Unimproved.
Twenty-fourth street west.	E street north	G street north	Feet.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	
Do.	G street north	Pennsylvania avenue	32							2,069	
Do.	Pennsylvania avenue	M street north	32					5,192			
Do.	M street north	Rock Creek	32					2,540			
Twenty-fifth street west.	Virginia avenue	River	32							1,200	
Do.	Pennsylvania avenue	Virginia avenue	32	1,163					3,550	5,735	Cobble from K to Pennsylvania avenue.
Do.	do	Rock Creek	30	1,693							
Twenty-sixth street west.	G street north	D street north	32							3,747	
Do.	do	K street north	32							3,378	
Do.	K street north	Pennsylvania avenue	32			1,680		5,042			
Do.	Pennsylvania avenue	M street north	32								
Twenty-seventh street west.	E street north	L street north	32	919				505			
Do.			32							8,651	
East Capitol street	First street east	Eleventh street east	50	17,915				6,044			
Do.	Eleventh street east	Eastern Branch	50								
A street north	First street east	Second street east	35	2,788							25,822
Do.	Second street east	Fourth street east	35	2,972							
Do.	Fourth street east	Eastern Branch	35	6,506							
A street south	First street east	Third street east	35	3,985							17,111
Do.	Third street east	Ninth street east	35	5,708							
Do.	Massachusetts avenue	Eastern Branch	35							3,033	
South side Lincoln Square	Delaware avenue	Maryland avenue	32	5,690				1,819	4,398		14,800
B street north	Maryland avenue	Eleventh street east	46	7,059							
Do.	Eleventh street east	Eastern Branch	35								
B street south	New Jersey avenue	Pennsylvania avenue	35					2,205		6,422	2,400
Do.	Pennsylvania avenue	Fifth street east	45	4,282							15,578
Do.	Fifth street east	Seventh street east	35	3,809							
Do.	Seventh street east	Twelfth street east	35	3,154							
Do.	Twelfth street east	Eastern Branch	35	4,578							368
B street north	Sixth street west	Seventh street west	32	12,057							6,076
Do.	Seventh street west	Twelfth street west	56		1,675			1,457			
Do.	Twelfth street west	Seventeenth street west	101		23,582			18,686			
Do.	Seventeenth street west	Twenty-third street west	60								18,680

Cobble from K to Pennsylvania avenue.

Cobble between R.R. tracks.

Do.

Do.

Do.

O. c. walk, curb, and gutter.

[illegible]

Character and extent of street pavements, July 1, 1891—Continued.

WASHINGTON—Continued.

Street.	From—	To—	Carriage way.							Remarks.	
			Width.	Asphalt or concrete.	Granite.	Wood.	Cobble and blue rock.	Macadam.	Gravel.		Unimproved.
E street north	Maryland avenue.....	Fifteenth street east.....	Feet. 35	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds. 9,042	Asphalt block. Asphalt surface and cobble foundation.
Do.....	North Capitol.....	New Jersey avenue.....	35	2,494	.....	.....	.....	.....	.....	.....	
Do.....	New Jersey avenue.....	Fourth street west.....	35	4,932	.....	.....	.....	.....	.....	.....	
Do.....	Fifth street west.....	Eleventh street west.....	40	9,323	.....	.....	.....	.....	.....	.....	
Do.....	Eleventh street west.....	Thirteenth street west.....	40	.....	2,487	.....	.....	.....	.....	.....	
Do.....	Thirteenth street west.....	Pennsylvania avenue.....	41-48	1,093	.....	.....	.....	.....	.....	.....	
Do.....	Thirteen-and-a-half street west.	Fifteenth street west.....	40	3,031							Curb set on north side. O. c. walk, curb, and gutter, from 11th to 19th street.
Do.....	Seventeenth street west.	Virginia avenue.....	32	.....	.....	.....	10,468	.....	.....	.....	
Do.....	Virginia avenue.....	Twenty-third street west	32	.....	.....	.....	.....	.....	1,600	.....	
Do.....	Twenty-third street west	Twenty-seventh street west.	32	.....	.....	.....	.....	.....	.....	5,871	
E street south	South Capitol.....	New Jersey avenue.....	35	.....	.....	.....	.....	.....	.....	.....	
Do.....	First street east.....	Nineteenth street east.....	35	.....	.....	.....	.....	.....	2,420	17,476	
Do.....											Asphalt from 3d st. to 7th st.
F street north	South Capitol.....	Fourteenth street west.	35	11,340	.....	.....	.....	.....	11,896	.....	
Do.....	North Capitol.....	Maryland avenue.....	35	8,339	.....	.....	.....	.....	11,661	.....	
Do.....	Maryland avenue.....	Fifteenth street east.....	35	.....	.....	.....	.....	.....	.....	6,200	
Do.....	North Capitol.....	New Jersey avenue.....	35	2,962	.....	.....	.....	.....	.....	.....	
Do.....	New Jersey avenue.....	Fourth street west.....	35	4,382	.....	.....	.....	.....	.....	.....	
Do.....	Fifth street west.....	Seventh street west.....	51	5,090				1,419			Cobble bet. R. R. tracks. Do. Do.
Do.....	Seventh street west.....	Ninth street west.....	57	1,913	527	.....	.....	771	.....	.....	
Do.....	Ninth street west.....	Fifteenth street west.....	60	11,684	.....	.....	.....	4,100	.....	.....	
Do.....	Seventeenth street west.	Eighteenth street west.	40	2,856	.....	.....	.....	.....	.....	.....	
Do.....	Eighteenth street west.	Twenty-second street west.	40	8,790	.....	.....	.....	.....	.....	.....	
Do.....	Twenty-second street west.	Twenty-seventh street west.	32	.....	.....	.....	.....	.....	.....	6,947	
G street south	South Capitol.....	Four-and-a-half street west.	35		6,777					988	
Do.....	Four-and-a-half street west.	Seventh street west.....	35	4,206	.....	.....	.....	.....	.....	.....	
Do.....	Seventh street west.....	Water street.....	35	.....	.....	.....	.....	6,838	.....	.....	

G street north	North Capitol	Fifteenth street east	35	2,308			1,768	480	Gravel from 6th to 13th st.
Do	do	First street west	35	3,802				3,210	
Do	do	Seventh street west	35	8,683		1,890			Cobble bet. R. R. tracks.
Do	do	Fifteenth street west	40	15,097					
Do	do	Twenty-second street west	36	10,275					
Do	do	Twenty-second street west	36		9,511				
G street south	Third street east	Seventeenth street east	35	1,730			10,887		O. c. walk, curb, and gutter, from 11th to 14th street.
Do	South Capitol	Four-and-a-half street west	35	2,475	6,517				O. c. walk, curb, and gutter, from 2d to 4th street.
Do	Four-and-a-half street	Eleventh street west	35	10,982					
Do	North Capitol	First street east	56	4,604		1,550			Cobble bet. R. R. tracks.
Do	do	Fifteenth street east	56	28,081		9,204	2,000		Do.
Do	do	First street west	50		8,337	3,000			Do.
Do	do	Fourth street west	56						
Do	do	Seventh street west	56	7,165					
Do	do	Thirteenth street west	35	9,067					
Do	do	Fourteenth street west	40	2,144					
Do	do	Fifteenth street west	56	1,948		655			Do.
Do	do	Fifteen-and-a-half street west	56	1,729		1,900			15th to 17th street, cobble between R. R. tracks.
Do	do	Nineteenth street west	56	8,328					
Do	do	Twenty-second street west	32	6,493					
Do	do	Twenty-seventh street west	32			9,422			
H street south	South Capitol	Water street	35	12,983	1,581			2,560	Gravel from North Capitol to 1st street east and from 7th to Boundary street.
I street north	North Capitol	Boundary	35	3,297			1,777	5,634	O. c. walk, curb, and gutter, 3d to 5th and 7th to 11th sts.
I street south	South Capitol	Georgia avenue	35				4,250	10,273	
I street north	North Capitol	New Jersey avenue	35	4,557					
Do	do	Massachusetts avenue	35	5,804					
Do	do	Eighth street west	32	4,210					
Do	do	Ninth street west	32	2,755					
Do	do	Tenth street west	32	2,090					
Do	do	Eleventh street west	32	8,813					
Do	do	Fifteenth street west	40	8,332					
Do	do	Vermont avenue	56	8,332					
Do	do	Seventeenth street west	40	2,672					
Do	do	Eighteenth street west	40						
Do	do	Nineteenth street west	40	5,536					
Do	do	Twentieth street west	40	6,296			7,536	583	O. c. walk, curb, and gutter, 4th to 7th street.
Do	do	Pennsylvania avenue	40						
Do	do	Twenty-sixth street west	35						
Do	do	Water street							
I street south	North Capitol	Seventh street east	50	4,498				15,058	

Do.....	Fourteenth street west..	40	4,573	.....	.....	.....	.....	.....	.....	6,084 square yards paved since 1878.
Do.....	Sixteenth street west...	40	11,875	.....	.....	.....	.....	.....	.....	
Do.....	New Hampshire avenue.	40	.....	.....	.....	.....	.....	.....	.....	
M street south.....	Twenty-sixth street west	35	9,171	.....	21,874	.....	.....	.....	.....	
Do.....	Four-and-a-half street west.	35	.....	.....	.....	.....	.....	.....	.....	
Do.....	Eastern Branch	35	.....	.....	.....	.....	.....	.....	.....	14,784
Do.....	Water street.....	35	.....	757	.....	.....	.....	.....	.....	3,203
N street north.....	Boundary.....	32	.....	.....	.....	.....	.....	.....	.....	7,300
Do.....	New Jersey avenue.....	32	.....	.....	.....	.....	.....	5,086	.....	578
Do.....	Fifth street west.....	32	3,311	.....	.....	.....	.....	.....	.....	
Do.....	Ninth street west.....	32	4,454	.....	.....	.....	.....	.....	.....	
Do.....	Fourteenth street west..	32	6,802	.....	.....	.....	.....	.....	.....	
Do.....	Scott Square.....	32	3,236	.....	.....	.....	.....	.....	.....	
Do.....	Twenty-first street west.	32	7,074	.....	.....	.....	.....	.....	.....	
Do.....	Rock Creek.....	32	.....	.....	1,870	.....	.....	.....	.....	5,319
N street south.....	Sixth street west.....	35	.....	.....	19,520	.....	.....	.....	.....	
Do.....	Eastern Branch.....	32	.....	.....	.....	.....	.....	.....	.....	4,878
Do.....	Boundary.....	32	.....	.....	.....	.....	.....	.....	.....	4,622
O street north.....	New Jersey avenue.....	32	.....	.....	.....	.....	.....	.....	.....	6,172
Do.....	Thirteenth street west..	32	14,530	.....	.....	.....	.....	.....	.....	
Do.....	Sixteenth street west...	32	1,663	.....	.....	.....	.....	.....	.....	
Do.....	Seventeenth street west..	32	1,697	.....	.....	.....	.....	.....	.....	
Do.....	Rock Creek.....	32	4,409	.....	.....	.....	.....	.....	.....	
O street south.....	Eastern Branch.....	32	.....	.....	.....	.....	.....	.....	.....	3,200
Do.....	Water street.....	32	.....	.....	.....	.....	.....	.....	.....	8,530
P street north.....	Boundary.....	32	.....	.....	.....	.....	.....	.....	.....	3,510
Do.....	New Jersey avenue.....	32	7,135	.....	.....	.....	.....	.....	.....	
Do.....	Eighteenth street west	32	21,716	.....	1,555	.....	.....	.....	.....	
Do.....	Du Pont Circle.....	32	1,569	.....	.....	.....	.....	.....	.....	
Do.....	Twenty-second street west.	40	.....	3,481	.....	.....	.....	.....	.....	
Do.....	Rock Creek.....	40	674	.....	.....	.....	.....	.....	.....	
P street south.....	Eastern Branch.....	32	.....	.....	.....	.....	.....	.....	.....	3,342
Do.....	Water street.....	30	.....	.....	.....	.....	.....	.....	.....	9,000
Q street south.....	Canal.....	30	.....	.....	.....	.....	.....	.....	.....	4,346
Do.....	Arsenal.....	30	.....	.....	.....	.....	.....	.....	.....	4,367
Q street north.....	Fifth street west.....	32	1,812	.....	.....	.....	.....	.....	.....	6,152
Do.....	Fourteenth street west..	32	10,429	.....	.....	.....	.....	.....	.....	
Do.....	Seventeenth street west..	32	6,769	.....	.....	.....	.....	.....	.....	
Do.....	Nineteenth street west..	32	4,903	.....	.....	.....	.....	.....	.....	
Do.....	Twentieth street west...	32	862	.....	.....	.....	.....	.....	.....	
Do.....	Twenty-second street west.	32	2,541	.....	.....	.....	.....	.....	.....	
R street north.....	Ninth street west.....	32	9,153	.....	.....	.....	.....	.....	.....	
Do.....	Fourteenth street west...	32	7,774	.....	.....	.....	.....	.....	.....	
Do.....	Sixteenth street west...	32	4,502	.....	.....	.....	.....	.....	.....	
Do.....	Boundary.....	32	5,329	.....	.....	.....	.....	.....	.....	4,582
R street south.....	Arsenal.....	30	.....	.....	.....	.....	.....	.....	.....	4,900
S street north.....	Vermont avenue.....	32	5,058	.....	.....	.....	.....	.....	.....	

O. c. walk, curb, and gutter
Cobble bet. R. R. tracks.

Character and extent of street pavements, July 1, 1891—Continued.
WASHINGTON—Continued.

Street.	From—	To—	Carriage way.						Remarks.	
			Width.	Asphalt or concrete.	Granite.	Wood.	Cobble and blue rock.	Macadam.		Gravel.	Unimproved.
8 street north.....	Vermont avenue.....	Sixteenth street west.....	Feet. 32	Sq. yds. 8,811	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.
Do.....	Sixteenth street west.....	Boundary.....	32	3,758						5,281
8 street south.....	South Capitol.....	Arsenal.....	30							
T street north.....	Boundary.....	Ninth street west.....	32							4,900
T street south.....	Ninth street west.....	Boundary.....	32							
U street north.....	Half street west.....	Arsenal.....	30						19,600	
U street south.....	Vermont avenue.....	Boundary.....	32							3,620
V street north.....	Arsenal.....	Eastern Branch.....	30	2,311					1,889	12,618
V street south.....	Vermont avenue.....	Boundary.....	32							3,633
W street north.....	Arsenal.....	Eastern Branch.....	30							13,325
Boundary.....	Boundary.....	Boundary.....	32							3,134
Do.....	Massachusetts avenue.....	Ninth street west.....	46						48,300	10,310
Do.....	Seventh street west.....	do.....	45		2,304					
Do.....	Sixth street west.....	Seventh street west.....	46							
Connecticut avenue.....	do.....	Fifteenth street east.....	46	9,362				3,019	2,508	47,040
Do.....	H street north.....	I street north.....	50	2,210						
Do.....	K street.....	Du Pont Circle.....	50	10,246						
Delaware avenue.....	Du Pont circle.....	Boundary.....	50	13,725					5,553	
Do.....	B street north.....	C street north.....	50							
Do.....	C street north.....	Boundary.....	50		2,056					
Georgia avenue.....	B street south.....	P street south.....	50							
Indiana avenue.....	Nineteenth street east.....	Eastern Branch.....	50						5,000	22,112
Kentucky avenue.....	First street west.....	Third street west.....	50							23,311
Louisiana avenue.....	Lincoln Square.....	Eastern Branch.....	120	7,690						35,556
Do.....	Sixth street west.....	Seventh street west.....	50							
Do.....	Pennsylvania avenue.....	Ninth street west.....	60		3,345					24,445
Maine avenue.....	Ninth street west.....	Tenth street west.....	50		1,137					
Maryland avenue.....	Third street west.....	Sixth street west.....	78½		4,765					
Do.....	First street west.....	Third street west.....	35						4,635	
Do.....	Third street west.....	Seventh street west.....	60	3,704					1,611	
Do.....	Seventh street west.....	Water street.....	60						12,803	
Do.....	Seventh street west.....	do.....	29-30		29,050					
Cobble bet. R. R. tracks. Cobble bet. R. R. tracks, 3,494 square yards. Two roadways, one 29 and one 30. This includes the north and south sides be- tween 7th and 9th streets.										

O. c. walk, curb, and gutter,
from 17th to 19th street.

Gravel from Massachusetts
avenue to R street.

Gravel from 6th to 8th st.

Cobble bet. R. R. tracks.
Includes Du Pont Circle.

Gravel from C to E street.

Cobble bet. R. R. tracks.
Cobble bet. R. R. tracks,
3,494 square yards.
Two roadways, one 29 and
one 30. This includes the
north and south sides be-
tween 7th and 9th streets.

[illegible]

Character and extent of street pavements, July 1, 1891—Continued.

WASHINGTON—Continued.

Street.	From—	To—	Carriage way.							Remarks.
			Width.	Asphalt or concrete.	Granite.	Wood.	Cobble and blue rock.	Macadam.	Gravel.		Unimproved.
Rhode Island avenue	Connecticut avenue	Scott Square	Feet.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.
Do	Scott Square	Iowa Circle	50	5,410						
Do	Iowa Circle	Boundary street	50	7,704					2,313	
South Carolina avenue	Second street east	Third street east	50							2,267
Do	Third street east	Eleventh street east		3,288					9,914	
Do	Eleventh street east	Massachusetts avenue	50							10,833
Tennessee avenue	Lincoln square	Fifteenth street east	50							17,222
Virginia avenue	South Capitol	Eleventh street east	50						2,354	13,708
Do	Eleventh street east	Eastern Branch	50							4,520
Do	South Capitol	Seventh street west	50		1,722			2,478		9,000
										13,580
Do	Ninth street west	Twelfth street west	50		4,111			1,898		
Do	B street north	G street north	50						21,110	
Do	G street north	Twenty-eighth st. west	50							9,167
Vermont avenue	H street north	I street north	93	4,156						
Do	K street north	Thomas Circle	59	6,536						
Do	Thomas Circle	Iowa Circle	50	6,149						
Do	Iowa Circle	Boundary	50	6,163						
City Hall space	Third street west	Sixth street west	60	4,766	5,897			1,711	5,576	6,424
				3,214						
Intersection of Louisiana avenue, Seventh, and C streets.										
Intersection of Louisiana and Ohio avenues.	Tenth street west	Twelfth street west	50		3,460					
Mount Vernon Place	Seventh street west	Ninth street west		3,899				835		
Thomas Circle	Intersection	Fourteenth and M sts	50	6,000				718		

Gravel from 5th street to Boundary street.

Gravel bet. 3d and 9th sts.

O. c. walk, curb, and gutter from South Capitol st. to 7th st. west. Blue rock on north side bet. 6th and intersection of D sts. Granite block pavement 25 ft. wide on south side bet. 4th and 6th sts., and cobble 25 ft. wide bet. 6th and 7th sts. Cobble bet. R. R. tracks.

Asphalt pavement to R st. Cobble bet. R. R. tracks, 382 sq. yards of asphalt blocks. Asphalt blocks.

Cobble bet. R. R. tracks. Do.

Character and extent of street pavements, July 1, 1891—Continued.

WASHINGTON—Continued.

Street.	From—	To—	Carriage way.							Remarks.
			Width.	Asphalt or concrete.	Granite.	Wood.	Cobble and blue rock.	Macadam.	Gravel.		Unimproved.
			Feet.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.
Pierce street.....	New Jersey avenue.....	North Capitol street....	32	5,535						
Pierce street.....	Fourteenth street north-west.	Fifteenth street north-west.	30	2,154						
Ridge street.....	Fourth street north west.	Fifth street north west..	32	2,518						
Riggs street.....	Thirteenth street north-west.	Fourteenth street north-west.	30	2,030						
Sanson street.....	Fourteenth street north-west.	Seventeenth street north-west.	24	4,408						
School street.....	Four-and-a-half street southwest.	Sixth street southwest..	34				2,346			
Corcoran street.....	Eighteenth street north-west.	Nineteenth street north-west.	20	1,163						
Sunderland place.....	New Hampshire avenue.	do.....	30	1,185						
Union street.....	M street south.....	O street south.....	40					5,333		
Washington street.....	Fourth street west.....	Fifth street west.....	35	2,128						
Wallach Place.....	Thirteenth street west..	Fourteenth street west..	30	2,075						
Warner street.....	Fifth street west.....	New Jersey avenue.....	30						1,600	
Water street.....	Seventh street west.....	Twelfth street west.....	50		16,858					
Do.....	Twelfth street.....	Thirteen-and-a-half street west.	50		2,827					2,729
Do.....	Seventh street.....	Sixth street, west.....	50		6,306					
Do.....	Sixth street, west.....	O street south.....	50		3,359					
Westminster street.....	Ninth street, west.....	Tenth street, north west.	30							1,777

GEORGETOWN.

M street.....	Rock Creek.....	Thirty-first street.....	50	9,026			2,833				Cobble between R. R. tracks.
Do.....	Thirty-first street.....	Thirty-sixth street.....	50				1,322				Do.
Water street.....	Rock Creek.....	Aqueduct.....	50		13,684						
Olive street.....	do.....	Twenty-eighth street.....	44		18,021					1,566	
Do.....	Twenty-eighth street.....	Thirtieth street.....	30				1,946				
Prospect street.....	Thirty-second street.....	Potomac street.....	30				2,504				

[illegible]

Character and extent of street pavements July 1, 1891—Continued.

SUMMARY STATEMENT.

Carriageway.	Length, feet.	Area sq. yards.	Miles.
Sheet asphalt	262, 570	1, 087, 858	49. 7
Coal tar	201, 640	881, 939	38. 2
Asphalt block	53, 410	242, 736	10. 1
Granite	129, 621	609, 687	24. 5
Cobble and blue rock	57, 302	440, 754	10. 8
Macadam	34, 902	293, 218	10. 4
Gravel	138, 675	530, 188	26. 2
Total improved	898, 120	4, 086, 380	169. 9
Unimproved	349, 473	1, 167, 672	65. 6
Grand total	1, 247, 593	5, 254, 052	235. 5

SUBURBAN STREETS.

Location.	Width.	Asphalt.	Granite blocks.	Mac- adam.	Gravel.
	<i>Feet.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>	<i>Sq. yds.</i>
Fourteenth street extended from Boundary north..	56	18, 515			
Brightwood avenue from Grant avenue northwest	56		9, 045		
Pomeroy street front of Freedman's Hospital....	30	2, 560			
Nichols avenue from Harrison avenue south	35		6, 520		
Chapin street from Fourteenth to Fifteenth	30	2, 185	674		
Stoughton street from Fourteenth to Fifteenth....	30	1, 583	755		
Eighteenth street extended from Boundary north..	32	3, 206			5, 753
Sheridan street from Seventh to Ninth.....	30			2, 660	
Massachusetts avenue extended from Boundary to Rock Creek	50			16, 400	
Lincoln avenue from Florida avenue to Bunker Hill road				2, 492	
Linden street northward.....	32	7, 081		3, 571	
R street from Florida avenue to Lincoln avenue ..	35	5, 091			
Maple avenue from Florida avenue to Linden street..	32	3, 227			
Larch street from Florida avenue to Maple avenue ..	32	1, 516			
Kenesaw and Wallach streets	60				9, 450
Howard avenue	30			692	
New Cut road	20			3, 695	
California avenue	30	2, 153		2, 209	
North Capitol street from Florida avenue to T street..	50			4, 064	
Brentwood road	30			2, 728	
Naylor road	20				5, 980
First street extended from Florida avenue to T street	36			3, 380	
Bunker Hill road					12, 000
Connecticut avenue extended from California ave- nue to Kalorama avenue		*2, 195			
Seventeenth street extended	45				2, 218
Ridge and Loughboro road	14				8, 037
Streets in Takoma Park	28				11, 107
Street in Eckington	35	*14, 931			
Minnesota avenue	70				20, 000
California street northeast bet. First and Second..		*1, 635			
Totals		65, 878	16, 994	41, 891	74, 545

Streets marked thus * were done under appropriations for paving and curbing roadways.

List of inspectors on sewer work.

Name.	Designation.	Com- pen- sa- tion.	Main and pipe sewer.		Construction of subur- ban sewers.		Replacing obstructed sewers.		Permit work.		Cleaning and re- pairing sewers and basins.	Gauging sewers and rainfall.
			No. of contract.	Amount.	No. of contract.	Amount.	No. of contract.	Amount.	No. of contract.	Amount.		
McComb, D. E.	Supt. of sewers	\$200.00	General serv- ices.	\$1,184.00	General serv- ices.	\$582.00	General serv- ices.	\$221.00	General serv- ices.	\$21.00	\$350.00	\$32.00
Baily, C.	Sub-inspector	2.50	do	65.00	do		do				67.50	
Ball, C. B.	Inspector	{ 4.80 5.50	do	1,231.20	do	247.50	do	16.50			11.00	
Beale, J. W.	do	4.00	do	129.00	do	67.00	do	28.00			28.00	
Boiseau, S. T.	Inspector of property	4.75	do	248.48	do	58.18	do	22.57		36.00		
Bowman, G. W.	Rodman	2.00	do	114.00	do	402.60	do	10.40		23.76	34.93	
Brashear, C. H.	Sub-inspector	{ 2.50 3.00	do	122.50	do	65.00	do	25.00				
Burns, G. C.	Axman	2.00	do	1.00	do		do			30.00	17.50	
Burson, J. W.	Sub-inspector	2.50	do	263.64	do	69.05	do	30		20		
Cobb, L. J.	Asst. observer	2.00	do		do		do	24.34		42.50	100.47	
Dickinson, H. M.	Sub-inspector	2.50	do	111.60	do	30.00	do	20.90				
Fuller, E. A.	Stenographer	3.00	do	339.66	do	181.28	do	69.13		34.02	42.85	455.15
Grey, W. J. W.	Sub-inspector	2.50	do	123.75	do	105.00	do	7.00		102.00	91.93	
Hamlink, F.	do	{ 2.00 2.50	do	516.64	do	111.25	do	7.50		7.50	11.75	
Hodgson, F. M.	Timekeeper	1.75	do		do		do					
Ingalls, O. L.	Time clerk	3.00	do	144.75	do		do					
Lambeth, A. M.	Inspector	4.00	do	195.00	do	842.20	do	20.80			764.25	
Larner, J. G.	do	3.85	do		do		do					
Mankin, H. D.	Sewer-tapper	3.20	do		do		do			1,301.30		
Melson, S. W.	Sub-inspector	2.00	do	76.00	do	44.10	do	161.90			1,001.60	
Nervis, E.	Inspector	2.50	do		do		do			332.00	22.00	
Nevitt, J. R.	Sub-inspector	4.00	do	208.00	do	48.60	do	20.52			776.25	
Oliver, J. N., jr.	Sub-inspector	2.00	do	399.50	do	81.50	do	4.00		18.00	27.00	
Oulahan, J. F.	Inspector	3.00	do	292.31	do	155.87	do	63.11				
Parker, R. H.	do	3.00	do	295.81	do	158.04	do	63.33		83.25	293.34	
Payne, J. E.	Sub-inspector	1.75	do	78.87	do	36.88	do	14.38		77.00	305.59	
Phillips, A. E.	do	{ 2.50 3.00	do	262.78	do		do			7.00	70.37	
Reese, F.	Rodman	2.50	do	141.25	do	364.00	do	45.10		64.50	144.31	
Server, M. T.	Inspector	4.00	do		do	525.00	do					
Simpson, W. H.	Sub-inspector	2.00	do		do		do				16.00	
Thurston, F. T.	Sewer-tapper	3.20	do		do		do				8.00	
Voss, W. H.	Observer	5.00	do		do		do				955.20	
	Sub-inspector	3.00	do	103.00	do	53.60	do	22.65		27.04	23.75	1,210.71

Wallace, G. W.	do	{ 2.50 }	do	800.60	do	45.20	do	294.80	do	622.00	44.00
Ward, M. E.	Inspector	{ 3.00 }	do	152.00	do	39.25	do	16.25	do	12.00	26.25
Webb, C. D.	do	3.00	do	159.75	do	14.50	do	57.00	do	206.00	4.00
Zug, Jno.	Sub-inspector	2.50	do	247.50	do	798.00	1267	84.00	1407	40.00	
Beach, B. F.	Inspector	4.00	1267	284.00	1267, 1387	359.00					
Clark, J. C.	do	{ 3.00 }	{ 1267, 1270, 1287 }	380.00	1267, 1287						
Curtis, C. T.	do	{ 4.00 }	1270, 1381	1,028.00	1270	130.00					
Groat, W. H.	do	{ 3.00 }	{ 1287, 1383 }	796.00	1382, 1383	385.00					
Hickey, E. P.	do	{ 4.00 }	1256	24.00							
Lamb, R. H.	do	4.00	1270	806.00	1270	240.00	1270	12.00	1270	90.00	
Marks, S. A. H.	do	4.00	1256, 1385	536.00	1256	208.00			1407	452.00	12.00
Shomo, J. M.	do	{ 3.00 }	{ 1270 }	393.00	1270	594.00			1270	24.00	
Venable, J. L.	do	{ 4.00 }	1287	1,172.00	1386	196.00					
Wilson, G. G.	do	4.00	1270, 1386, 1385	254.00	1270	16.00			1270	6.00	
Woodward, G. T., jr.	do	4.00	1405	156.00							
Zug, Jno.	do	4.00	1405	688.00							

NOTE.—The rate of compensation given is the rate per diem with the exception of that of the superintendent of sewers, which is \$200 per month.

472 REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA.

List of inspectors on surface work, for fiscal year ending June 30, 1891.

Name.	Work on streets and avenues.		Repairs to concrete pavements.		Permit work.		Constructing county roads.		Suburban streets.		Total days.	Rate per day.	Total amount.
	Days.	Amount.	Days.	Amount.	Days.	Amount.	Days.	Amount.	Days.	Amount.			
Wm. Donaldson	308	\$1,232.00									308	\$4.00	\$1,232.00
F. Reeside	65	260.00									65	4.00	260.00
M. T. Server	48	96.00									48	2.00	96.00
Do	259	777.00									259	3.00	777.00
J. A. Batts	189	283.50									189	1.50	283.50
O. W. Brown	52	104.00									52	2.00	104.00
W. P. Cuff	50	100.00			29	\$58.00			26	\$52.00	105	2.00	210.00
J. A. E. Maroney	135	472.50	105½	\$369.25							240½	3.50	841.75
P. Reilley			313	1,565.00							313	5.00	1,565.00
G. W. Beall			312	1,248.00							312	4.00	1,248.00
Edw. Nervis	134	536.00	36	144.00	12	48.00	31	\$124.00			213	4.00	852.00
Wm. Welch									21	84.00	21	4.00	84.00
Henry Naylor							46	184.00	52	208.00	98	4.00	392.00
W. H. Voss	137	411.00			26	78.00	19	57.00	27	81.00	209	3.00	627.00
E. C. Pitz									19	38.00	19	2.00	38.00
E. Y. Beggs	229	1,603.00							27	189.00	256	7.00	1,792.00
A. J. White			26	91.00							26	3.50	91.00
R. H. Parker	172½	302.31	41½	72.19							214	1.75	374.50
E. Deitilech	171	427.50					20	50.00			191	2.50	477.50
W. H. O'Connor	161	483.00	11	33.00	21	63.00	49	147.00			242	3.00	726.00
C. Bailey	219	547.50			13	32.50					232	2.50	580.00
J. W. Beall	130	520.00	10	40.00	25	100.00	4	16.00			169	4.00	676.00
L. T. Boiseau	135	641.25	6	28.50	12	57.00	34	161.50			187	4.75	888.25
E. P. Hickey	125	500.00	44	176.00							169	4.00	676.00
E. D. Webb	109	327.00	8	24.00	9	27.00	29	87.00			135	3.00	465.00
John Lattimore	104	260.00	3	7.50	4	10.00	4	10.00			115	2.50	287.50
S. M. Chase	111	222.00	11	22.00	4	8.00	5	10.00			131	2.00	262.00
Thomas Sweeney	23	34.50	8	12.00							31	1.50	46.50
J. E. Payne	19	47.50									19	2.50	47.50
Thomas McMahon	154	616.00	14	56.00							168	4.00	672.00
Charles Maynard	79	118.50	36	54.00	2	3.00	90	135.00			207	1.50	310.50
C. R. Unger	214	856.00			5	20.00					219	4.00	876.00
J. N. Clarkson	183	732.00			30	120.00					213	4.00	852.00
W. H. Calhoun	93	372.00					11	44.00			104	4.00	416.00
R. McMurray	88	352.00					76	304.00			164	4.00	656.00
J. N. Quackenbush	139	556.00					6	24.00			145	4.00	580.00
J. R. Howard	124	496.00									124	4.00	496.00
W. E. Burton	163	652.00									163	4.00	652.00
John Steinmetz	77	308.00	23	92.00			8	32.00			108	4.00	432.00
J. H. Crawford	130	520.00					23	92.00			153	4.00	612.00
J. L. Calhoun	137	548.00	3	12.00			4	16.00			144	4.00	576.00
Thomas Clagett	189	756.00									189	4.00	756.00
T. B. McCleod	60	240.00					35	140.00			95	4.00	380.00
F. A. Beuter	107	428.00					5	20.00			112	4.00	448.00
A. M. Bond	35	140.00	6	24.00			116	464.00			157	4.00	628.00
J. B. Master	36	144.00									36	4.00	144.00
E. Morris	90	225.00			45	112.50	13	32.50			148	2.50	370.00
H. M. Dickerson	12	30.00			22	55.00	13	32.50			47	2.50	117.50
J. Murphy	114	122.50					14	21.00			128	1.50	143.50
George C. Burns	61½	123.50			6	12.00	6½	13.00			74½	2.00	148.50
R. B. Hunter	59	118.00					3½	7.00			62½	2.00	125.00
W. S. Clark							12	48.00			12	4.00	48.00
George T. Mason	26	104.00					9	36.00			35	4.00	140.00
C. S. Pearson					31	62.00	26	52.00			57	2.00	114.00
W. L. Dorsey	34	85.00									34	2.50	85.00
W. J. W. Gray	26	65.00			18	45.00					44	2.50	110.00
William Brown	14	56.00	16	64.00							30	4.00	120.00
F. M. Dixon					2	6.00					2	3.00	6.00
Jos. Sembly			3	4.50	9	13.50					12	1.50	18.00
William Hill			1	3.00	1	3.00					2	3.00	6.00
George Gray	139	208.50	26	39.00	21	31.50	30	45.00			216	1.50	324.00
J. A. Breen	58	232.00					115½	462.00			173½	4.00	694.00
William Talbot	49	73.50	12	18.00	41	61.50	7	10.50			109	1.50	163.50
H. J. Sherman					15	30.00					15	2.00	30.00
J. Renfro	113	186.45	5	8.25			4	6.60			122	1.65	201.30
J. M. Jackson	113	169.50	5	7.50			4	6.00			122	1.50	183.00
Charles Fernald	225½	869.14	15	57.75	5	19.25	10½	40.42			256½	3.85	986.56
R. L. Morgan	34	68.00	8	16.00	131	262.00					173	2.00	346.00
R. D. Simmes							302	1,208.00			302	4.00	1,208.00
Total		20,758.15		4,288.44		1,337.75		4,138.02		652.00			31,174.36

REPORT OF COMMISSIONERS OF DISTRICT OF COLUMBIA. 473

Subdivision of lands.

Name.	Days.	Compensation.	Total amount.
F. P. Spalding	150	\$5 per diem	\$750. 00
	78	\$100 per month	300. 00
M. C. Hazen	146	\$70 per month	394. 00
	73	\$60 per month	168. 46
T. J. Fisher	289	\$50 per month	577. 94
A. S. Fernald	173	\$45 per month	302. 88
Thomas Sweeney	169	\$1.50 per diem	253. 50
H. J. Sherman	120	\$60 per month	278. 29
J. J. Callahan	70	\$60 per month	161. 54
Henry Donovan	30	\$1.50 per diem	45. 00
A. Toppen		do	219. 00
Total	146		3, 451. 36

SUMMARY.

Work on streets and avenues	\$20, 758. 15
Repairs to concrete pavement	4, 288. 44
Permit work	1, 337. 75
Constructing county roads	4, 138. 02
Suburban streets	652. 00
Subdivision of lands	3, 450. 61
Total	34, 625. 72

LIST OF INSPECTORS REPORTED BY THE SUPERINTENDENT OF STREETS (SURFACE WORK).

List of inspectors employed in the District of Columbia during the fiscal year ending June 30, 1891, reported by the superintendent of streets.

Name.	Rank.	Days.	Rate per day.	Amount paid.	Paid from appropriation.
E. D. Tracy	Inspector	286	\$4. 00	\$1, 144. 00	Current repairs to streets, alleys, etc.
Alfred Cock	do	256 $\frac{1}{2}$	3. 25	833. 62	Do.
R. A. Bass	do	100	2. 50	250. 00	Do.
William Brown	do	8	4. 00	32. 00	Do.

List of inspectors paid from street-lighting appropriation.

Name.	Work.	Days.	Per day.	Amount.	From what appropriation.
O. L. Ingalls	Inspector	39	\$4. 00	\$156. 00	Street lighting, 1891.
L. G. Stanhope	do	10	4. 00	40. 00	Do.
G. W. Bowman	Subinspector	36	2. 50	90. 00	Do.
Total				286. 00	

LIST OF INSPECTORS, WATER DEPARTMENT, ENGAGED ON MANUFACTURE OF CAST-IRON PIPE.

List of inspectors employed in the distribution branch, water department, during fiscal year ending June 30, 1891.

Name.	Work.	Days.	Per day.	Amount.	From what appropriation.
W. J. Hoyt	Inspector on cast-iron pipe	215	\$4. 00	\$860. 00	Salaries.
H. P. Hoyt	do	46 $\frac{1}{2}$	3. 00	140. 00	Do.
Total				\$1, 000. 00	

W.

REPORT OF SUPERINTENDENT OF CHIMNEY SWEEPS.

GEORGETOWN, D. C., *June 29, 1891.*

GENTLEMEN: In compliance with your letter of June 1, 1891, requesting me to furnish a detailed statement to your office showing the amount of work done by me for the past year ending June 30, 1891, I would respectfully state that I have swept about seventy-five chimneys in Georgetown at the rate of 20 cents per story. Some people paid 25 cents a story when I had to employ a helper on dangerous roofs to hold a ladder for me and swept from the top. I swept about twenty-five or thirty chimneys in Washington at 25 cents a story. I would respectfully state as in many cases where I am called to sweep chimneys that I have to employ a helper and only receive 20 cents a story, and I would ask that it be increased to 25 cents a story. Many of the property holders here have told me that they were willing to pay me 25 cents a story, as they said it was little enough for such dangerous work.

Trusting that this statement will be satisfactory,

I remain, very respectfully, your obedient servant,

JAMES TWINE,

Superintendent Chimney Sweeps.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

X.

REPORT OF PROPERTY CLERK.

OFFICE OF THE PROPERTY CLERK,
August 21, 1891.

GENTLEMEN: In compliance with your request of June 30, 1891, asking for an estimate of the amount required for the conduct and support of this office for the fiscal year ending June 30, 1893, also a detailed statement of its operations for the fiscal year ending June 30, 1891, and for such recommendations as I deem advisable for increasing the efficiency of my office, I have the honor to request that you will make the estimates for the employés of this office for the fiscal year ending June 30, 1893, as follows:

1 property clerk	\$1, 600
1 clerk	1, 400
1 clerk	1, 000
1 clerk	900
1 messenger clerk.....	600
Making in all	5, 500

You will notice that the above estimates are a slight increase over the present appropriation. I most earnestly recommend that you grant the request for another clerk, for the business of the office has increased to such an extent that it is almost impossible to carry it on with the force I now have. As it is, it is necessary for me to work with my clerks after office hours in order to keep up the current work of the office. I also earnestly request that you grant the slight increase asked for for the clerks now employed in my office, their present compensation being entirely too small for the duties they perform.

I call attention to the fact that I now have a messenger credited to my office at a salary of \$480 per annum who performs no duties whatsoever in connection with the office, but is acting in that capacity in the office of the assessor. The business of this office is of too miscellaneous a nature to admit of the making of an abstract report. The labors have greatly increased during the past year, owing to the increased appropriations and the number of contractors on whom orders were given for all supplies furnished the various offices of the District.

I keep an account of all appropriations and expenditures of the various offices of the District except those for charitable institutions and the erection and repair of school buildings, police stations, and engine houses.

I have the drawing of requisitions for the expenditure of the appropriation for transportation of prisoners and the supervision and care of the two vans, horses, harness, etc., used in the transportation of prisoners, as well as the looking after of all other appropriations, except those above mentioned, to prevent the overexpenditure, thereby creating deficiencies.

I have the preparing of the specifications for all supplies and school furniture furnished the District, and the advertising of the same.

I have control of all condemned property that is in possession of the District, such as horses, wagons, harness, hose, etc., and see that the same is disposed of at public auction to the highest bidder, the money from which is turned into the office of the collector of taxes by the auctioneer.

All requisitions for supplies are first sent to this office, and from here they are forwarded to the honorable Commissioners for their approval, bearing an estimated amount of the cost and the state of the appropriation thereon from which they are to be paid. Upon the return of these requisitions approved I then issue the official orders upon the contractors, or purchase the articles in open market, as the case may be. In many cases I have verbal agreements with various business houses in this and other cities where there has been no contract entered into whereby I get a discount of from 10 to 25 per cent, varying according to the class of goods purchased.

I call attention to the fact that these orders have greatly increased during the past year, owing to the number of contractors upon whom orders are made.

The number of requisitions forwarded to this office during the fiscal year ending June 30, 1891, was 2,685, and the number of orders issued thereon was 6,782. The number of vouchers examined, briefed, and forwarded to the auditor for payment was 4,773.

Thanking you, gentlemen, for the kindness and uniform courtesy you have shown me during the past year, I remain, very respectfully, your obedient servant,

F. O. BECKETT,
Property Clerk.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

WASHINGTON, D. C., *November 5, 1891.*

GENTLEMEN: In accordance with your request I have the honor to submit herewith a brief synopsis of the work of the office of the property clerk during the fiscal year ending June 30, 1891, viz: The work of the office is increasing from year to year, as the business of the various departments of the District government increase with the growth of the city. Appropriations for their support are increased and consequently the needs of the departments increase, thereby causing more and larger requisitions for supplies. These supplies for all departments of the District government are purchased by me upon requisitions made by the heads of the departments and approved by the honorable Commissioners. I am unable to give a detailed statement of the purchases of this office and the distribution of the supplies owing to the lack of clerical help to classify and arrange it. To classify and tabularize a statement of all the purchases and the distribution of the same would require the time of one employé continuously for six months of the year. I have only two employés to assist me in the labors of the office, and their time is wholly taken up in the daily routine work of the office. I spend much time after office hours each day in making purchases or attending to other duties pertaining to the office. I have repeatedly urged you to allow me an additional employé. The salaries of the employés of this office are entirely inadequate for the importance of the

work done by them. I make all purchases of supplies for the District government, examine, brief, and approve all bills for supplies purchased by me. I feel that the office does not receive the consideration at your hands that it deserves. The number of requisitions made upon this office for supplies, etc., was 2,685. The number of orders for supplies given was 6,782, and the number of bills examined, approved, and sent to the auditor for payment was 4,773 (see below schedule of prices paid for supplies under contract). I urgently request that the compensation of the employes of this office be arranged to read as follows, viz:

	Per annum.
1 property clerk.....	\$1,600
1 order clerk.....	1,400
1 bill clerk.....	1,000
1 clerk.....	900
1 messenger clerk.....	600

I am, respectfully, your obedient servant,

F. O. BECKETT,
Property Clerk, District of Columbia.

The COMMISSIONERS OF THE DISTRICT OF COLUMBIA.

CLASS I.—Stationery.

Books, memorandum:		Chalk:	
Sheep, indexed, 4½ by 6½, 100 leaves,	\$1.30	White.....per pound..	\$0.04
per dozen.....		Red.....do.....	.10
Sheep, indexed, 4½ by 7½, 100 leaves,	2.20	Crayons, chalk, equal to New York	
per dozen.....		Crayon Co.'s.....per gross..	.05½
4½ by 7½, 50 leaves, sheep, indexed,	1.50	Envelopes, white:	
per dozen.....		• No. 4, XXX.....per M..	1.29
4½ by 7½, 100 leaves, sheep, faint rule,	2.00	No. 5, XXX.....do.....	1.25
per dozen.....		No. 6, XXX.....do.....	1.40
4½ by 7½, 50 leaves, sheep, faint rule,	1.40	No. 9, XXX.....do.....	2.25
per dozen.....		No. 10, XXX.....do.....	2.50
Books, time, 7½ by 4½, full sheep, monthly,	1.25	No. 11, XXX.....do.....	3.10
50 leaves, per dozen.....		Irish linen, Baronial No. 1, Marcus	
Books, letter copy:		Ward's.....per M..	6.00
500 pages, letter size, full sheep, per	1.15	Erasers:	
sample.....each.....		Steel, best knife blade, Rogers'	
700 pages, cap size, full sheep, per	1.45	white handle, No. 18149, per dozen.	4.00
sample.....each.....		Ink and pencil, Faber's mammoth,	
1,000 pages, cap size, full sheep, per	2.00	per dozen.....	1.10
sample.....each.....		Ink, and paper-cleaners, Faber's im-	
Books, scratch:		proved.....per dozen..	.30
No. 4024.....per dozen..	.22½	Rubber, American States Pen Co.'s	
No. 4026.....do.....	.29	Electric No. 40.....per dozen..	.75
No. 4028.....do.....	.40	Files, Shipman's adhesive:	
No. 4030.....do.....	.50	10 by 12, 250 leaves.....each..	.57
No. 4046.....do.....	.90	9 by 15, 500 leaves.....do.....	.93
No. 4068.....do.....	1.75	9 by 13, 250 leaves.....do.....	.59
Bells:		File-holders, Woodruff's:	
Call, No. 3200 (Bradley & Hubbard's),		Poplar, 9 by 9½ inches.....per dozen..	4.50
each.....	.70	Black walnut front, 9 by 9½ inches,	
Hand, No. 8, heavy (Barton's) brass,	4.50	per dozen.....	5.70
per dozen.....		Hones, office, Scotch, 5-inch, in boxwood	
Hand, large, No. 10 (Barton's) brass,	6.90	cases, genuine.....per dozen..	7.00
per dozen.....		Ink, Faber's violet black, copying, per	
Baskets, office:		quart.....	.40
Large, telegram, No. 20-3, per dozen.	4.08	Ink, Underwood's:	
Small, telegram, No. 20-2.....do.....	3.58	Everlasting bank fluid.....per quart..	.40
Blotters, Moore's, polished rosewood,		Combined writing and copying,	
large.....per dozen..	2.99	cobalt.....per quart..	.45
Bands, rubber, Faber's pure:		Egyptian black fluid.....do.....	.40
No. 12, thread.....per gross..	.09	Cobalt extra copying.....do.....	.43½
No. 16, thread.....do.....	.12	Egyptian black combined writing	
No. 32, ½-inch.....do.....	.36	and copying.....per quart..	.45
No. 33, ½-inch.....do.....	.40	Carmines.....do.....	1.30
No. 000, ½-inch.....do.....	.63	Ink, Carter's:	
No. 0000, ½-inch.....do.....	.70	Copying and writing, combined, per	
No. 000, ¾-inch.....do.....	.80	quart.....	.50
No. 0000, ¾-inch.....do.....	.90	Crimson.....per quart..	1.00
No. 000, heavy, ½-inch.....do.....	.99	"Blak".....do.....	.30
No. 0000, heavy, ½-inch.....do.....	1.10	Writing fluid.....do.....	.32
No. 000, ¾-inch.....do.....	1.20	Raven black (school).....do.....	.19
No. 0000, ¾-inch.....do.....	1.60	French copying.....do.....	.35

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CLASS I.—Stationery—Continued.

Ink, Arnold's:		
Fluid, genuine.....	per quart..	\$0.33
Fluid, genuine.....	per pint..	.19
Ink, Williams':		
Black (school).....	per quart..	.20
Writing and copying combined, per quart.....		.22
Ink, Thomas' black, glass bottles, per quart.....		.30
Ink, David's:		
Carmine, No. 4, glass stoppers, per dozen.....		4.45
Blue.....	per pint..	.18
Ink, Stafford's:		
Fluid, commercial.....	per quart..	.31
Copying (machine).....	do.....	.51
Blue black, office.....	do.....	.33
Universal.....	do.....	.32
Carmine.....	do.....	1.30
Ink, Barnes':		
Jet black national.....	do.....	.24
National writing fluid.....	do.....	.24
National copying.....	do.....	.39
Writing and copying.....	do.....	.33
National carmine.....	do.....	.95
Ink:		
Black, American standard.....	do.....	.20
Writing fluid, American Standard, per quart.....		.20
Writing and copying, American standard.....	per quart..	.30
Cochrane's red.....	per pint..	.50
Papyrographic.....	per bottle..	.90
Hektograph.....	do.....	.20
Color papyrographic.....	do.....	1.25
India, liquid, Windsor & Newton's, per bottle.....		.22
Inkstands, bankers':		
No. 50.....	per dozen..	3.50
Double, No. 1.....	do.....	20.00
Single, No. 1.....	do.....	8.75
No. 60.....	do.....	.72
Inkstands, glass stoppers, No. 308, 3-inch, per dozen.....		1.13
Ink vents, perfection bottle-stopper, per dozen.....		1.25
Ink wells:		
Metallic, glass-lined, Whitcomb's, per dozen.....		1.65
Novelty.....	per dozen..	1.50
Dulany's.....	do.....	.70
Ink-extractors, Bloede's.....		1.50
Mucilage, best, Carter's great stickest, or equal to.....		.48
Mucilage founts:		
Morgan's, No. 2.....	per dozen..	1.25
Morgan's, No. 6.....	do.....	3.00
Wolf's nickel-plated.....	do.....	8.00
Mucilage stands:		
Carter's, 5 ounce.....	do.....	1.65
Carter's, 10 ounce.....	do.....	3.00
McGill's fasteners:		
1-inch (100 in box), flat head, No. 1, per box.....		.716
1-inch (100 in box), flat head, No. 2, per box.....		.16
1-inch (100 in box), flat head, No. 3, per box.....		.18
1-inch (100 in box), flat head, No. 4, per box.....		.25
Single, staple (250 in box), per box.....		.20
Paper:		
Legal cap, 14 pounds, ruled, equal to Whiting Paper Co.'s, per ream.....		1.80
Foolscap, white, 14 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....		1.80
Letter, white, 12 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....		1.63
Letter, white, 14 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....		1.80
Note, white, 6 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....		.81
Paper—Continued.		
Note, packet, 7 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....		\$1.00
Paper, typewriter:		
Cap size, equal to Regent No. 4, W. S. & B.....	per ream of 500 sheets..	1.25
Letter size, equal to Regent No. 4, W. S. & B.....	per ream of 500 sheets..	1.10
Cap size, equal to Paragon, 1½ wove, W. S. & B.....	per ream of 500 sheets..	1.20
Letter size, equal to Paragon, 1½ wove, W. S. & B.....	per ream of 500 sheets..	.96
Paper:		
Commercial note, Irish linen, best Marcus Ward's.....	per ream..	2.30
Examination, 12 pounds.....	per ream..	1.65
Drawing, Wharman's double elephant, 27 x 40.....	per sheet..	.15
Blotting, Treasury blotter No. 100, 90 pounds to ream.....	per ream..	11.25
Carbon, cap size.....	per quire..	.60
Wrapping, Manilla, assorted sizes, No. 1.....	per pound..	.07
Light Manilla tissue, cap size, per ream.....		.13½
Oil, full sheet, 20 x 24, heavy board, per sheet.....		.06
Hektograph, cap, in blocks.....	each..	.75
Hektograph, letter, in blocks.....	do.....	.50
Hektograph, note, in blocks.....	do.....	.25
Pens, Spencerian:		
No. 1.....	per gross..	.40
No. 2.....	do.....	.40
No. 3.....	do.....	.40
No. 5 (school).....	do.....	.40
No. 33 (school).....	do.....	.50
No. 27.....	do.....	.50
No. 28.....	do.....	.50
Pens, Gillet's:		
No. 303.....	do.....	.73
No. 404.....	do.....	.40
Pens, Dreka's engrossing, No. 3.....		.57
Pens, Esterbrook's:		
No. 128 (school pen).....	do.....	.37½
No. 048, Falcon.....	do.....	.41
No. 333.....	do.....	.44
No. 444.....	do.....	.34
Pens, Barnes's National:		
No. 1.....	do.....	.35
No. 248.....	do.....	.40
Pens, Mann's Golden Falcon.....		1.18
Pens, miscellaneous (all kinds not enumerated).....		.60
Pens, Mozellic.....		2.50
Pens, Miller Bros':		
University, No. 28 (school).....	do.....	.40
No. 4.....	do.....	.47
No. 444.....	do.....	.34
No. 99.....	do.....	.48
Pens, ruling:		
Alteneder's, any size.....	per dozen..	14.00
Gisburne's.....	per set..	.20
Pens, American States Pen Co.'s:		
No. 1848, Falcon.....	per gross..	.55
No. 27, Chase's Legal.....	do.....	.90
No. X292X, public schools.....	do.....	.55
No. 3X3, academic.....	do.....	.90
No. 4X4, university.....	do.....	.55
No. 144, Tar State.....	do.....	.90
No. 1900, gold-plated Falcon.....	do.....	1.70
Penholders, American States Pen Co.'s:		
No. 2X2.....	per gross..	1.00
No. 5X5.....	do.....	1.00
No. 7X7.....	do.....	.95
No. 1881.....	do.....	1.10
No. 1848.....	do.....	2.60
No. 59.....	do.....	2.60
Penholders, wood:		
No. 2240, Faber's.....	do.....	.68
Nos. 1537, 1538, 1539, Faber's.....	do.....	2.85
Penholders, rubber:		
No. 1, short and long.....	per dozen..	.75
No. 2, short and long.....	do.....	.80
No. 3, short and long.....	do.....	.85

CLASS I.—Stationery—Continued.

Penholders, rubber—Continued.			Pointers, blackboard, 4, 5, and 6 feet, each.	\$0.15
No. 4, short and long.....	per dozen..	\$0.95	Rulers, boxwood, brass edge:	
Penholders, Eagle Pencil Co.'s:			12-inch, Faber's, 112.....	per dozen.. 2.75
Crown No. 1.....	do.....	.27	16-inch, Faber's, No. 2.....	do..... 3.30
Crown No. 2.....	do.....	.30	18-inch, Faber's, 112.....	do..... 4.00
Crown No. 3.....	do.....	.33	24-inch, Faber's, 112.....	do..... 5.00
Crown No. 4.....	do.....	.35	Rulers, gutta-percha, flat:	
Penholders, Eagle:			12-inch.....	do..... 1.40
No. 1407.....	per gross..	.65	16-inch.....	do..... 1.90
Nos. 2411, 3411, 4411.....	do.....	1.57	18-inch.....	do..... 2.20
Nos. 2712, 3712, 4712.....	do.....	1.75	24-inch.....	do..... 3.20
Nos. 2331, 3331, 4331.....	do.....	2.77	Rubbers:	
No. 2722, pen-ejecting.....	do.....	2.50	Eagle pencil and ink eraser, me-	
Pencils, lead:			dium.....	per dozen.. .44
Faber's hexagon, best, Nos. 1, 2, 3, 4, 5,			Blackboard, Novelty crayon eraser,	
per gross.....		5.66	per dozen.....	.54
Faber's round, best, Nos. 1, 2, 3, 4, 5,			Bevel eraser, Eagle Pencil Com-	
per gross.....		4.15	pany, any size.....	per dozen.. .30
Faber's hexagon, artists', 2 H, 3 H, 4			Diamond academic, Eagle Pencil Com-	
H, 5 H, and 6 H, Siberian, per gross.....		9.00	pany (1094).....	per dozen.. .36
Pencils, colored, combined carmine and			Diamond, Spencerian No. 4, per	
blue, extra, 9-inch.....	per dozen..	.22½	dozen.....	.45
Pencils, Dixon's American graphite:			Shears, 10-inch, Seymour Bankers', each..	.57
S, S. M., H., and V. H.....	per gross..	3.50	Sponge for cups, best.....	per pound.. .80
Rubber tip, No. 552.....	do.....	4.50	Sponge cups, bankers', 3-inch, heavy, per	
Pencils:			dozen.....	.65
Artists', Dixon's American graphite,			Scale, triangular, boxwood, 10ths and	
assorted.....	per gross..	7.50	inches.....	each.. 1.00
A. S. P. Co.'s Monumental.....	do.....	3.60	Twine:	
A. S. P. Co.'s Graham.....	do.....	3.36	Linen.....	per pound.. .40
A. S. P. Co.'s Thos. Jefferson.....	do.....	3.02	Hemp.....	do..... .18
Eagle, rubber, Perfection, No. 140, per			Elm and flax.....	do..... .36
gross.....		.60	Thermometers, 7-inch, japanned, tin	
Eagle, hexagon, gold, 1, 1½, 2, 2½, 3, 4, 5,			frame.....	each.. .07½
per gross.....		3.80	Tape, red, No. 21, 72 yards to spool, per	
Eagle, round, gold, 1, 1½, 2, 2½, 3, 4, 5,			spool.....	.19½
per gross.....		2.88	Triangles, rubber, all sizes.....	per dozen.. 3.00
Eagle, fine arts, 6 B to 6 H, per gross.....		7.50	Tablets:	
Eagle, colored crayons, any color, per			Memorandum, note size.....	per dozen.. .06
dozen.....		.36	Memorandum, assorted sizes, per	
Faber's, colored crayons, any color,			dozen.....	.60
per dozen.....		.50	Sandpaper, 2½ x 4 inches.....	per dozen.. .75
Eagle, hexagon, office, No. 402, per			Letter size, ruled to order.....	do.. 1.50
dozen.....		.46	Tacks, thumb, German silver, any size,	
Eagle, automatic, red, green, black,			per dozen.....	.15½
and copying ink, size A, per dozen.....		1.25	Tapelines, Chesterman's best:	
Eagle, compass, No. 553.....	do.....	.40	100 feet, metallic.....	each.. 3.00
Carpenters', Eagle, 435.....	do.....	.12	50 feet, metallic.....	do.. 1.85
Carpenters', Eagle, 462.....	do.....	.18	100 feet, steel.....	do.. 8.75
Pencil leads, for automatic pencils:			50 feet, steel.....	do.. 5.00
Indelible.....	per dozen..	.40	Tracing cloth, imperial, or equal to:	
Colored.....	do.....	.16½	36-inch.....	per roll.. 5.50
Pins, toilet, in pyramids of 360 pins:			42-inch.....	do.. 7.40
No. 2.....	per paper..	.05 ⁴ / ₁₀	Water colors, assorted, full cake (Wind-	
No. 3.....	do.....	.05 ⁴ / ₁₀	sor & Newton's).....	per cake.. .30
No. 4.....	do.....	.05 ⁴ / ₁₀	Wax, sealing, best quality.....	per pound.. .25
No. 5.....	do.....	.05 ⁴ / ₁₀	Ink, David's:	
Pins, toilet, Eureka:			Blue-black record.....	per quart.. .30
No. 2.....	do.....	.05 ⁴ / ₁₀	Combination writing and copying,	
No. 3.....	do.....	.05 ⁴ / ₁₀	per quart.....	.30
No. 4.....	do.....	.05	Chemical writing fluid.....	per quart.. .30
No. 5.....	do.....	.05	Magic black (jet black) (school) per	
Paper-cutters, ivory, 10-inch Congress,			quart.....	.17
per dozen.....		5.00	Raven's permanent black.....	per quart.. .25
Paste, parlor, equal to Schoville Manu-			Scarlet.....	do.. .75
facturing Company.....	per quart..	.50		

CLASS II.—Blank forms and printing.

Forms, blank, flat letter, full sheet, ruled			Forms, blank, cap, two to the sheet, ruled		
and printed on one or both sides:			and printed on one or both sides:		
12-lb. paper.....	per M..	\$5.75	16-lb. paper.....	per M..	\$4.97½
14-lb. paper.....	do.....	6.00	Linen ledger, 18-lb. paper.....	do.....	6.50
Forms, blank, flat letter, two to the sheet,			Forms, blank:		
ruled and printed on one or both sides:			Cap, four to the sheet, ruled and print-		
12-lb. paper.....	per M..	3.30	ed on one or both sides, 16-lb. paper,		
14-lb. paper.....	do.....	3.35	per M.....		2.80
12-lb. paper.....	do.....	1.40	Demy, full sheet, ruled and printed		
14-lb. paper.....	do.....	1.60	on one or both sides, 28-lb. paper,		
Forms, blank, cap, full sheet, ruled and			per M.....		13.00
printed on one or both sides:			Demy, four to the sheet, ruled and		
Linen ledger, 18-lb. paper.....	per M..	11.50	printed on one or both sides, linen		
16-lb. paper.....	do.....	8.90	ledger, 28-lb. paper.....	per M..	6.25

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CLASS I.—Stationery—Continued.

Ink, Arnold's:	
Fluid, genuine.....per quart..	\$0.33
Fluid, genuine.....per pint..	.19
Ink, Williams':	
Black (school).....per quart..	.20
Writing and copying combined, per quart.....	.22
Ink, Thomas' black, glass bottles, per quart.....	.30
Ink, David's:	
Carmine, No. 4, glass stoppers, per dozen.....	4.45
Blue.....per pint..	.18
Ink, Stafford's:	
Fluid, commercial.....per quart..	.31
Copying (machine).....do.....	.51
Blue black, office.....do.....	.33
Universal.....do.....	.32
Carmine.....do.....	1.30
Ink, Barnes':	
Jet black national.....do.....	.24
National writing fluid.....do.....	.24
National copying.....do.....	.39
Writing and copying.....do.....	.33
National carmine.....do.....	.95
Ink:	
Black, American standard.....do.....	.20
Writing fluid, American Standard, per quart.....	.20
Writing and copying, American standard.....per quart..	.30
Cochrane's red.....per pint..	.50
Papyrographic.....per bottle..	.90
Hektograph.....do.....	.20
Color papyrographic.....do.....	1.25
India, liquid, Windsor & Newton's, per bottle.....	.22
Inkstands, bankers':	
No. 50.....per dozen..	3.50
Double, No. 1.....do.....	20.00
Single, No. 1.....do.....	8.75
No. 60.....do.....	.72
Inkstands, glass stoppers, No. 308, 3-inch, per dozen.....	1.13
Ink vents, perfection bottle-stopper, per dozen.....	1.25
Ink wells:	
Metallic, glass-lined, Whitcomb's, per dozen.....	1.65
Novelty.....per dozen..	1.50
Dulany's.....do.....	.70
Ink-extractors, Bloede's.....do.....	1.50
Mucilage, best, Carter's great stickest, or equal to.....per quart..	.48
Mucilage founts:	
Morgan's, No. 2.....per dozen..	1.25
Morgan's, No. 6.....do.....	3.00
Wolf's nickel-plated.....do.....	8.00
Mucilage stands:	
Carter's, 5 ounce.....do.....	1.65
Carter's, 10 ounce.....do.....	3.00
McGill's fasteners:	
$\frac{1}{4}$ -inch (100 in box), flat head, No. 1, per box.....	.16 $\frac{1}{2}$
$\frac{1}{4}$ -inch (100 in box), flat head, No. 2, per box.....	.16 $\frac{1}{2}$
$\frac{3}{4}$ -inch (100 in box), flat head, No. 3, per box.....	.18 $\frac{1}{2}$
1-inch (100 in box), flat head, No. 4, per box.....	.25
Single, staple (250 in box), per box..	.20
Paper:	
Legal cap, 14 pounds, ruled, equal to Whiting Paper Co.'s, per ream....	1.80
Foolscap, white, 14 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....	1.80
Letter, white, 12 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....	1.63
Letter, white, 14 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....	1.80
Note, white, 6 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....	.81

Paper—Continued.	
Note, packet, 7 pounds, plain or ruled, equal to Whiting Paper Co.'s, per ream.....	\$1.00
Paper, typewriter:	
Cap size, equal to Regent No. 4, W. S. & B.....per ream of 500 sheets..	1.25
Letter size, equal to Regent No. 4, W. S. & B.....per ream of 500 sheets..	1.10
Cap size, equal to Paragon, $1\frac{1}{2}$ wove, W. S. & B., per ream of 500 sheets..	1.20
Letter size, equal to Paragon, $1\frac{1}{2}$ wove, W. S. & B., per ream of 500 sheets..	.96
Paper:	
Commercial note, Irish linen, best Marcus Ward's.....per ream..	2.30
Examination, 12 pounds.....per ream..	1.65
Drawing (Whatman's double elephant, 27 x 40).....per sheet..	.15
Blotting, Treasury blotter No. 100, 90 pounds to ream.....per ream..	11.25
Carbon, cap size.....per quire..	.60
Wrapping, Manilla, assorted sizes, No. 1.....per pound..	.07
Light Manilla tissue, cap size, per ream.....	.13 $\frac{1}{2}$
Oil, full sheet, 20 x 24, heavy board, per sheet.....	.06
Hektograph, cap, in blocks.....each..	.75
Hektograph, letter, in blocks.....do.....	.50
Hektograph, note, in blocks.....do.....	.25
Pens, Spencerian:	
No. 1.....per gross..	.40
No. 2.....do.....	.40
No. 3.....do.....	.40
No. 5 (school).....do.....	.40
No. 33 (school).....do.....	.50
No. 27.....do.....	.50
No. 28.....do.....	.50
Pens, Gillot's:	
No. 303.....do.....	.73
No. 404.....do.....	.40
No. 404.....do.....	.57
Pens, Dreka's, engrossing, No. 3.....do.....	.37$\frac{1}{2}$
Pens, Esterbrook's:	
No. 128 (school pen).....do.....	.41
No. 048, Falcon.....do.....	.44
No. 333.....do.....	.34
No. 444.....do.....	.34
Pens, Barnes's National:	
No. 1.....do.....	.35
No. 248.....do.....	.40
No. 248.....do.....	1.18
Pens, Mann's Golden Falcon.....do.....	.60
Pens, miscellaneous (all kinds not enumerated).....per gross..	2.50
Pens, Mozellic.....do.....	.40
Pens, Miller Bros':	
University, No. 28 (school).....do.....	.47
No. 4.....do.....	.34
No. 444.....do.....	.48
No. 99.....do.....	.48
Pens, ruling:	
Alteneder's, any size.....per dozen..	14.00
Gisburne's.....per set..	.20
Pens, American States Pen Co.'s:	
No. 1848, Falcon.....per gross..	.55
No. 27, Chase's Legal.....do.....	.90
No. X292X, public schools.....do.....	.55
No. 3X3, academic.....do.....	.90
No. 4X4, university.....do.....	.90
No. 144, Tar State.....do.....	1.70
No. 1900, gold-plated Falcon.....do.....	1.70
Penholders, American States Pen Co.'s:	
No. 2X2.....per gross..	1.00
No. 5X5.....do.....	.95
No. 7X7.....do.....	1.10
No. 1881.....do.....	2.60
No. 1848.....do.....	2.60
No. 59.....do.....	.68
Penholders, wood:	
No. 2240, Faber's.....do.....	2.85
Nos. 1537, 1538, 1539, Faber's.....do.....	.75
Penholders, rubber:	
No. 1, short and long.....per dozen..	.80
No. 2, short and long.....do.....	.85
No. 3, short and long.....do.....	.85

CLASS I.—Stationery—Continued.

Penholders, rubber—Continued.			
No. 4, short and long.....per dozen..	\$0.95	Pointers, blackboard, 4, 5, and 6 feet, each.	\$0.15
Penholders, Eagle Pencil Co.'s:		Rulers, boxwood, brass edge:	
Crown No. 1.....do.....	.27	12-inch, Faber's, 112.....per dozen..	2.75
Crown No. 2.....do.....	.30	16-inch, Faber's, No. 2.....do.....	3.30
Crown No. 3.....do.....	.33	18-inch, Faber's, 112.....do.....	4.00
Crown No. 4.....do.....	.35	24-inch, Faber's, 112.....do.....	5.00
Penholders, Eagle:		Rulers, gutta-percha, flat:	
No. 1407.....per gross..	.65	12-inch.....do.....	1.40
Nos. 2411, 3411, 4411.....do.....	1.57	16-inch.....do.....	1.90
Nos. 2712, 3712, 4712.....do.....	1.75	18-inch.....do.....	2.20
Nos. 2331, 3331, 4331.....do.....	2.77	24-inch.....do.....	3.20
No. 2722, pen-ejecting.....do.....	2.50	Rubbers:	
Pencils, lead:		Eagle pencil and ink eraser, me-	
Faber's hexagon, best, Nos. 1, 2, 3, 4, 5,		dium.....per dozen..	.44
per gross.....	5.66	Blackboard, Novelty crayon eraser,	
Faber's round, best, Nos. 1, 2, 3, 4, 5,		per dozen.....	.54
per gross.....	4.15	Bevel eraser, Eagle Pencil Com-	
Faber's hexagon, artists', 2 H, 3 H, 4		pany, any size.....per dozen..	.30
H, 5 H, and 6 H, Siberian, per gross..	9.00	Diamond academic, Eagle Pencil Com-	
Pencils, colored, combined carmine and		pany (1094).....per dozen..	.36
blue, extra, 9-inch.....per dozen..	.22½	Diamond, Spencerian No. 4, per	
Pencils, Dixon's American graphite:		dozen.....	.45
S., S. M., H., and V. H.....per gross..	3.50	Shears, 10-inch, Seymour Bankers', each..	.57
Rubber tip, No. 552.....do.....	4.50	Sponge for cups, best.....per pound..	.80
Pencils:		Sponge cups, bankers', 3-inch, heavy, per	
Artists', Dixon's American graphite,		dozen.....	.65
assorted.....per gross..	7.50	Scale, triangular, boxwood, 10ths and	
A. S. P. Co.'s Monumental.....do.....	3.60	inches.....each..	1.00
A. S. P. Co.'s Graham.....do.....	3.36	Twine:	
A. S. P. Co.'s Thos. Jefferson.....do.....	3.02	Linen.....per pound..	.40
Eagle, rubber, Perfection, No. 140, per		Hemp.....do.....	.18
gross.....	.60	Elm and flax.....do.....	.36
Eagle, hexagon, gold, 1, 1½, 2, 2½, 3, 4, 5,		Thermometers, 7-inch, japanned, tin	
per gross.....	3.80	frame.....each..	.07½
Eagle, round, gold, 1, 1½, 2, 2½, 3, 4, 5,		Tape, red, No. 21, 72 yards to spool, per	
per gross.....	2.88	spool.....	.19½
Eagle, fine arts, 6 B to 6 H, per gross..	7.50	Triangles, rubber, all sizes..per dozen..	3.00
Eagle, colored crayons, any color, per		Tablets:	
dozen.....	.36	Memorandum, note size..per dozen..	.06
Faber's, colored crayons, any color,		Memorandum, assorted sizes, per	
per dozen.....	.50	dozen.....	.60
Eagle, hexagon, office, No. 402, per		Sandpaper, 2½ x 4 inches..per dozen..	.75
dozen.....	.46	Letter size, ruled to order.....do.....	1.50
Eagle, automatic, red, green, black,		Tacks, thumb, German silver, any size,	
and copying ink, size A, per dozen..	1.25	per dozen.....	.15½
Eagle, compass, No. 553.....do.....	.40	Tapelines, Chesterman's best:	
Carpenters', Eagle, 435.....do.....	.12	100 feet, metallic.....each..	3.00
Carpenters', Eagle, 462.....do.....	.18	50 feet, metallic.....do.....	1.85
Pencil leads, for automatic pencils:		100 feet, steel.....do.....	8.75
Indelible.....per dozen..	.40	50 feet, steel.....do.....	5.00
Colored.....do.....	.16½	Tracing cloth, imperial, or equal to:	
Pins, toilet, in pyramids of 360 pins:		36-inch.....per roll..	5.50
No. 2.....per paper..	.05 ⁴ / ₁₆	42-inch.....do.....	7.40
No. 3.....do.....	.05 ⁴ / ₁₆	Water colors, assorted, full cake (Wind-	
No. 4.....do.....	.05 ⁴ / ₁₆	sor & Newton's).....per cake..	.30
No. 5.....do.....	.05 ⁴ / ₁₆	Wax, sealing, best quality..per pound..	.25
Pins, toilet, Eureka:		Ink, David's:	
No. 2.....do.....	.05 ⁴ / ₁₆	Blue-black record.....per quart..	.30
No. 3.....do.....	.05 ⁴ / ₁₆	Combination writing and copying,	
No. 4.....do.....	.05	per quart.....	.30
No. 5.....do.....	.05	Chemical writing fluid...per quart..	.30
Paper-cutters, ivory, 10-inch Congress,		Magic black (jet black) (school) per	
per dozen.....	5.00	quart.....	.17
Paste, parlor, equal to Schoville Manu-		Raven's permanent black..per quart..	.25
facturing Company.....per quart..	.50	Scarlet.....do.....	.75

CLASS II.—Blank forms and printing.

Forms, blank, flat letter, full sheet, ruled		Forms, blank, cap, two to the sheet, ruled	
and printed on one or both sides:		and printed on one or both sides:	
12-lb. paper.....per M..	\$5.75	16-lb. paper.....per M..	\$4.97½
14-lb. paper.....do.....	6.00	Linen ledger, 18-lb. paper.....do.....	6.50
Forms, blank, flat letter, two to the sheet,		Forms, blank:	
ruled and printed on one or both sides:		Cap, four to the sheet, ruled and print-	
12-lb. paper.....per M..	3.30	ed on one or both sides, 16-lb. paper,	
14-lb. paper.....do.....	3.35	per M.....	2.80
12-lb. paper.....do.....	1.40	Demy, full sheet, ruled and printed	
14-lb. paper.....do.....	1.60	on one or both sides, 28-lb. paper,	
Forms, blank, cap, full sheet, ruled and		per M.....	13.00
printed on one or both sides:		Demy, four to the sheet, ruled and	
Linen ledger, 18-lb. paper..per M...	11.50	printed on one or both sides, linen	
16-lb. paper.....do.....	8.90	ledger, 28-lb. paper.....per M...	6.25

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CLASS II.—Blank forms and printing—Continued.

Forms, blank—Continued.

Folio post, full sheet, ruled and printed on one or both sides, 28-lb. paper.....per M...	\$15.84
Folio post, two to the sheet, ruled and printed on one or both sides, 28-lb. paper.....per M...	6.75
Folio post, four to the sheet, ruled and printed on one or both sides, 28-lb. paper.....per M...	2.98
Medium, full sheet, ruled and printed on one or both sides, 36-lb. paper, per M.....	20.00
Medium, two to sheet, ruled and printed on one or both sides, 36-lb. paper.....per M...	10.24
Medium, four to sheet, ruled and printed on one or both sides, 36-lb. paper.....per M...	5.75

Forms, blank—Continued.

Royal, full sheet, ruled and printed on one or both sides, 45-lb. paper, per M.....	\$27.00
Royal, half sheet, ruled and printed on one or both sides, 45-lb. paper, per M.....	14.00
Printing, official letter heads, half sheet, per ream.....	.45
Printing, official envelopes.....per M...	.40
Printing, miscellaneous:	
Pica.....per M ems...	.68
Small pica.....do.....	.50
Long primer.....do.....	.45
Brevier.....do.....	.45
Nonpareil.....do.....	.32

CLASS III.—Schoolbooks.

Algebra, Wentworth's Elements of, abridged.....per dozen..	\$10.90
Analysis, Word, Swinton's:	
Old edition.....do.....	3.00
New edition.....do.....	3.60
Arithmetic:	
Ficklin's Elementary.....do.....	3.98
Ficklin's National.....do.....	6.98
Davies' Intellectual.....do.....	2.50
Bible, 12mo, roan (brevier).....do.....	6.00
Brooks, Spencer's New Copy, Nos. 1, 2, 3, 4, 5, 6.....do.....	.81
Books, drawing:	
Prang's Manual (Clarke edition) per dozen.....	4.80
Prang's Shorter Course, Nos. 2 and 3.....per dozen..	1.40
Prang's American Text-Books of Art Education (large and small) per dozen.....	1.60
Child's Health Primer, A. S. Barnes & Co.....per dozen..	3.00
Dictionary:	
Academic, Worcester's.....do.....	15.00
Worcester's Unabridged (latest edition), indexed, sheep.....each..	7.00
Munroe's Vocal and Physical Training, per dozen.....	7.50
Geography:	
Swinton's Introductory...per dozen..	5.60
Swinton's Grammar School....do.....	13.00
Grammar:	
Kerl's Common School.....do.....	7.30
Latin, Allen and Greenough's.do.....	11.00

History:

Egleston's United States.....do....	\$10.60
Barnes' Brief United States ..do....	10.00
of England, Thompson's.....do....	9.10
Lossing's Cyclopedia of the United States.....per dozen....	86.00
Hygiene for Young People.....do....	5.00
Lessons:	
Language, Kerl's.....do.....	3.30
Leighton's Latin.....do.....	11.00
Physiology, Steele's Hygiene.....do....	10.00
Physics, Gage's Elements of.....each..	.95
Readers:	
First, and Primer, Franklin (new), per dozen.....	2.48
Second, Franklin (new)...per dozen..	3.70
Third, Franklin (new).....do.....	5.15
Fourth, Franklin (new).....do.....	6.20
Intermediate, Franklin.....do.....	5.50
Fifth, Franklin (new).....do.....	8.70
Mason's Music, First (new).....do....	2.55
Mason's Music, Second (new).do....	4.00
Mason's Music, Third (new).....do....	4.00
Mason's Abridged Music, Fourth (revised edition).....per dozen..	7.50
Mason's Music, Intermediate ..do....	4.00
Mason's Music, Abridged Independent (revised edition)...per dozen..	6.00
Geographical, Scribner's.....do....	6.15
Record, Tracey's School.....do.....	5.74
Spellers, Pronouncing, Worcester's New, per dozen.....	2.37
Pronouncing Gazetteer, Lippincott's, each.....	7.30

CLASS IV.—Furniture.

Bookcase, Danner's revolving:

No. 2, standard, 40 inches high. each..	\$11.75
No. 3, standard.....do.....	12.90
No. 4, standard.....do.....	14.90
Carpets, body Brussels, American, five-frame, as per samples submitted, per yard.....	1.02
Carpet-lining paper, best quality, 5 rows, stitched.....per yard..	.034
Chair bottoms, all sizes, perforated, per dozen.....	1.50
Chairs, common, wood, bent tops, per dozen.....	4.00
Chairs, oak:	
Perforated seat, bent top, 486, P. Haywood, Bros. & Co.....per dozen..	6.31
Arm, cane-seated (rodded), Douglass, per dozen.....	15.95
Arm, wood seat (rodded), Douglass, per dozen.....	14.95
Chairs, black walnut:	
Arm, cane-seated, office (rodded), Douglass.....per dozen..	22.00

Chairs, black walnut—Continued.

Arm, cane-seated, S. & S. office (rodded), Continental...per dozen..	\$47.50
Cane-seated, high-back, arm, revolving, tipping, harmony, per dozen..	122.50
Senate, S. & S.....do.....	133.50
Chairs, American bent, No. 453, Haywood Bros. & Co.....per dozen..	18.50
Dusters, ostrich feather:	
Full center, No. 7.....do.....	2.20
Eighteen-inch, full center, parlor duster, per sample.....per dozen..	19.00
Holland:	
Best American, for window shades, per square yard.....	.16
Best Scotch.....per square yard..	.204
Linoleum (best quality).....do.....	.55
Mattresses, hair, made up, best quality, per pound.....	.37
Matting:	
Cocon, best quality, white, per square yard.....	.48
Napier, best quality, per square yard.....	.48

CLASS IV.—Furniture—Continued.

Matting—Continued.					
Straw, best quality, white, as per sample submitted, per square yard.....	\$0.30		Tumblers, glass, per sample.. per dozen..	\$0.50	
Straw, fancy, as per sample submitted..... per square yard..	.30		Water coolers, Hall's or equal to:		
Mats, cocoa, office, plain, best quality, per square foot.....	.27		3 gallons, walnut..... each..	3.35	
Oilcloth, best quality, per square yard..	.45		4 gallons, walnut..... do....	4.80	
Opaque, best quality, for window shades, per square yard.....	.16		6 gallons, walnut..... do....	6.40	
Pillows, feather, made up... per pound..	.45		8 gallons, walnut..... do....	7.25	
Pitchers, half-gallon, English granite, best hall-boy, jug, No. 12..... each..	.25		Water coolers, Ruby, Jewett's:		
Spittoons, cuspidor:			3½ gallons..... do....	4.35	
Iron, porcelain-lined, per sample, per dozen.....	6.00		5 gallons..... do....	5.25	
Nickel-plated, loaded-bottom, per sample..... per dozen..	10.50		6½ gallons..... do....	6.50	
			8 gallons..... do....	7.75	
			Water-cooler stands, with drip pan and 4-inch post..... each..	1.65	
			Window shades, making and hanging only..... per shade..	.16	
			Window rollers, Hartshorn (all lengths):		
			1 and 1½ inch, tin barrel.. per dozen..	5.14	
			1 and 1½ inch, wood barrel..... do....	2.23	

CLASS V.—Hardware.

Awls:			Files:		
Pegging, assorted..... per dozen..	\$0.02½		Flat, 4, 6, 8, 10, 12, 14, and 16 inch, bastard..... per dozen..	\$1.95	
Sewing, assorted..... do....	.03		Flat, 4, 6, 8, 10, 12, 14, and 16 inch, smooth..... per dozen..	2.50	
Awl handles, peg, brad, sewing, assorted, per dozen.....	.10		Saw, all sizes, 3-cornered..... do....	.43	
Axes, wood, all sizes, equal to Mann's, each.....	.49		Round, 5, 6, 8, 10, 12 inch, bastard and smooth..... per dozen..	.99	
Axle grease, Diamond X. per dozen boxes..	.50		Square, 5, 6, 8, 10, and 12 inch, bastard and smooth..... per dozen..	1.23	
Axle grease, Moss'..... per pound..	.06		Half round, 4, 6, 8, 10, 12, 14, and 16 inch, bastard and smooth, per doz..	2.40	
Bits, auger, assorted sizes, ½ to 1½ inch, Russell Jennings'..... each..	.14		Forks, hay, best 3-prong, strapped, with long handle, Fairmount or equal to..... per dozen..	2.90	
Blacking, shoe:			Forks, manure, 4-prong, strapped:		
Army and Navy, No. 4... per dozen..	.39		Long handle, Fairmount or equal to, per dozen.....	3.15	
Mason's, No. 4..... do....	.41		D handle, Fairmount or equal to, per dozen.....	3.24	
Blacking dips, Royal dauber..... do....	1.60		Fuse, powder:		
Buckets:			Double water-proof..... per foot..	.00½	
Oak, 3-hoop, iron bail.... per dozen..	4.09		Cotton..... do....	.00½	
Indurated fiber, Star pail..... do....	4.40		Felt, roofing, tarred..... per pound..	.02½	
Water, cedar, 3 galvanized hoops, per dozen.....	2.99		Handles:		
Brooms:			Sledge, XX..... per dozen..	.85	
Corn, heavy, 5-string, as per sample, 30 lbs. to dozen..... per dozen..	2.58		For sweeping brushes, 6 feet per sample..... per dozen..	.55	
Whisk, per sample..... do....	1.35		For rattan brooms, 6 feet, per sample..... per dozen..	.39	
Rattan, 14-inch, heavy, per sample, per dozen.....	2.40		Mop and brush, Hart's or equal to, per dozen.....	.90	
Rattan, 16-inch, heavy, 6-row, per sample..... per dozen..	4.49		Mop..... per dozen..	.85	
Bass, 16-inch, heavy, per sample per dozen.....	4.49		Ax, XX..... do....	.84	
Brushes:			Pick, XX..... do....	.86	
Whitewash, 12 knots, 00000, extra, extra, per sample..... per dozen..	16.50		Hasps and staples, 10-inch and under, per dozen.....	.24	
Whitewash, per sample, No. 5, Crescent, extra..... per dozen..	18.50		Hasps, hinged, 10-inch and under, per dozen.....	.60	
Shoe, polishing, per sample, per doz..	4.12		Hatchets:		
Dusting, per sample, No. 5, extra, all white..... per dozen..	4.49		Shingling, Nos. 2 and 3, Peck's or equal to..... per dozen..	4.17	
Sweeping, 14-inch, per sample, per dozen.....	15.39		Half, Nos. 2 and 3, Peck's or equal to, per dozen.....	4.25	
Sweeping, 18-inch per sample, per dozen.....	18.69		Hinges, strap:		
Scrub, all bristle, No. 52... per dozen..	1.87		6-inch and under, light.... per pair..	.03½	
Bolts, stove, 2-inch and under, all kinds, per 100.....	.30		8 to 12 inch, inclusive, light... do....	.07	
Bolts, door, wrought iron, square or round:			6 to 10 inch, inclusive, heavy... do....	.13	
5-inch and under..... per dozen..	.63		12 to 16 inch, inclusive, heavy... do....	.21	
6 and 8 inch..... do....	1.20		Hinges:		
10 and 12..... do....	2.30		Blind, No. 0 to 3-inch, heavy, Lull & Porter..... per pair..	.06	
Bolts, carriage, 5-inch and under. per 100..	.66		Inside shutter, back flaps, all sizes, per pair.....	.01½	
Brads:			Hinges, butt:		
1 to 3 inch, wire..... per pound..	.05½		Fast and loose, 2 by 2 to 3½ by 3½, per pair.....	.05	
¾-inch and under, wire..... do....	.07		Fast and loose, 4 by 4 to 5 by 5, per pair.....	.09	
Babbitt metal, No. 2..... do....	.09		Inside blind, any size..... per pair..	.01½	
Cloth, crocus..... per sheet..	.02		Hinges:		
Cord, sash:			T. 6-inch and under, light.. per pair..	.03	
Hemp, Russia..... per pound..	.14½				
Braided, Silver Lake, all sizes, per pound.....	.27				
Emery cloth, all numbers..... per quire..	.42				
Eagle Tripoli..... per dozen papers..	.50				

CLASS V.—Hardware—Continued.

Hinges—Continued.

T, 6 to 12 inch, inclusive, extra heavy, per pair	\$0.09
T, 8 to 12 inch, inclusive, light, per pair	.05
T, 14 and 16 inch, extra heavy, per pair	.18
Brass, butt, 3 by 2 inch and under, fast, per pair	.07
Hooks and eyes, brass, 5-inch and under, per dozen	.40
Horseshoe rasps, 14 to 16 inch, Heller's or equal to per dozen	5.12
Hooks and staples, wrought iron, 8-inch and under per dozen	.25
Hooks and hinges, screw and drive, assorted sizes per pound	.03
Hammers:	
Claw, adze eye, all steel, Plumb's or equal to each	.29
Stone, all steel, napping per pound	.09
Sledge, all steel, blacksmiths', per lb.	.08
Hoes, steel, best:	
Solid socket, garden each	.20
Solid socket, for street use, 10-inch blade, Harper's or equal to each	.34
Mortar No. 3, Harper's or equal to, each	.40
Iron:	
Bar, American, all sizes, refined, flat or square	.02½
Round, American, 1½-inch and under, refined per pound	.02½
Norway, round, flat, or square, per pound	.04½
Knobs, door, bronzed iron, No. 2025, M. W. & Co.'s per pair	.22
Keys, blank, brass per dozen	.42
Locks:	
Pad, No. 20, M. W. & Co.'s per dozen	3.39
Jail, latest improved Scandinavian, Star per dozen	2.39
Pad, No. 1033, M. W. & Co.'s do	1.90
Rim, 4-inch, No. 2202, M. W. & Co.'s, per dozen	2.55
Rim, 5-inch, No. 927, M. W. & Co.'s, per dozen	3.59
Mortice, 5-inch, No. 1022, M. W. & Co.'s per dozen	4.69
Cottage rim, 5-inch, No. 178½ M. W. & Co.'s per dozen	4.40
Latches:	
Store door, No. 3, Reading Hardware Co.'s per dozen	.75
Night, Yale, No. 42 do	14.50
Ladders, step, Adams' or equal to, per foot	.11
Mattocks, adze-eye, 6 pounds, long cutter, Iron City or equal to per dozen	5.75
Mops, floor, cotton, 15 pounds do	1.80
Nails:	
Horseshoe, best, Putman per pound	.16
Hinge, wrought, pump do	.09
Slating, all sizes do	.03½
Clout, in 1-pound papers, ¾-inch to 2-inch per paper	.05
Nails, cut:	
Finishing, 6 to 10 penny per pound	.05
Lathing, 3-penny, fine do	.03½
3-penny do	.02½
4 and 5 penny do	.02½
6 and 7 penny do	.02½
8 and 9 penny do	.02½
10-penny do	.02½
12, 16, and 20 penny do	.02½
30-penny do	.02
40-penny do	.01½
50 and 60 penny do	.01½
Nails, wrought, all sizes do	.02½
Nails, steel wire:	
3-penny per pound	.03½
4 and 5 penny do	.03½
6 and 7 penny do	.03½
8 and 9 penny do	.03½
10-penny do	.03½
12, 16, and 20 penny do	.05½
Paper, sand, Baeder, Adamson & Co.'s, per quire	.12½

Pegs, shoe per quart	\$0.04
Picks, adze-eye, 6 to 9 pounds, Iron City Tool Works, Pittsburg, Pa. per dozen	5.25
Powder, blasting per pound	.08½
Pruners, tree, Waters' improved, 4 to 12 feet each	.90
Pruning blades, Waters' do	.15
Rope:	
All sizes, pure manilla per pound	.15½
Cotton, all sizes, "A" quality do	.16
Rakes:	
Steel, 14 teeth per dozen	3.30
Malleable iron, 14 teeth do	1.80
Stone, round teeth, No. 30, Fairmount or equal to per dozen	2.60
Wrought iron, concrete rake, long shank per dozen	11.75
Rivets and burrs, copper, all sizes, per pound	.22
Rules, full brass-bound, carpenters', 2-foot, each	.20
Scoops, coal, cast-steel, all sizes, Remington, or equal to per dozen	11.28
Spikes, 4 to 7 inch, cut per pound	2.13
Scythes:	
American, Wadsworth's clipper, or equal to each	.38
English, Waldron's do	1.05
Scythe stones, round, English do	.05
Shovels, best, D handle:	
Ames' per dozen	8.17
Hussey, Binns & Co.'s, Pittsburg, Pa., per dozen	8.03
Shovels, long-handled, best, round or square points:	
Ames per dozen	8.38
Hussey, Binns & Co.'s, Pittsburg, per dozen	8.03
Spades, Ames', long or short handle, per dozen	8.67
Saws:	
Hand, Diston's, cross-cut or rip, each	1.19
Buck, Diston's each	.22
Compass, Diston's do	.23
Slating:	
Silicate, black diamond per gallon	3.49
Blackboard, Mound City do	2.40
Shoes, horse, Perkins' or equal to, per pound	.03½
Screwdrivers, 12-inch and under, round blade, black handle each	.17
Screws:	
1-inch, No. 12 and under per gross	.17
1½-inch, No. 12 and under do	.24
1½-inch, No. 14 and under do	.27
2-inch, No. 14 and under do	.32
Twine, Mason's per pound	.25
Tacks:	
6, 8, and 10 ounce papers, full weight, per paper	.03
12, 14, 16, and 18 ounce papers, full weight per paper	.05
Turnbuckles, cast-iron, japanned:	
For wood per dozen	.19
For brick do	.18
Washboards, double, zinc do	1.90
Wheelbarrows:	
Dirt, steel, Jackson, No. 4 each	6.81
Dirt, steel, No. 4, Kilbourne & Jacobs Manufacturing Company's each	5.71
Wood, with sides, garden, Nos. 2 to 4, Kilbourne & Jacobs Manufacturing Company's each	2.89
Wood, sand, Kilbourne & Jacobs Manufacturing Company's each	1.63
Wrench, monkey:	
6-inch and under, Coe's knife-handle, each	.24
8-inch Coe's knife-handle each	.33
10-inch, Coe's knife-handle do	.42
12-inch, Coe's knife-handle do	.52
14-inch, Coe's knife-handle do	.86
18-inch, Coe's knife-handle do	1.12
Wire, copper, all sizes per pound	.22

CLASS VI.—*Tinware.*

Brick, fire:			Elbows, American iron, all sizes.....each..	\$0. 10
For stoves.....per hundred..	\$2. 50		Fire clay, Nos. 1 and 2.....per barrel..	5. 00
Square, Mount Savage.....do.....	4. 00		Lanterns:	
Buckets:			Tubular, No. 0, Dietz.....each..	. 65
Tin, green, 20-quart, with lip covered,			Tubular, No. 0, Dietz, red globes..do...	. 37½
per dozen.....	6. 00		Railroad, for coal oil.....do...	1. 00
Tin, slop jar, painted.....per dozen..	4. 00		Railroad, red globes, for coal oil..do...	1. 10
Galvanized iron, 10-quart.....do.....	2. 96		Plates, tin, pie, 9-inch.....per dozen..	. 27
Basins, wash, 12-inch, stamped tin, re-			Pipe, stove, American iron, all sizes, per	
tinned, 035, with foot.....per dozen..	1. 00		pound.....	. 14
Cups:			Pans, dust, corrugated, painted, steel edge,	
Stamped tin, retinned, 010, 4½-inch, per			per dozen.....	2. 00
dozen.....	. 46		Polish, stove:	
Stamped iron, quarts, retinned, No. 100,			Sticks, Dixon's square.....per dozen..	. 50
per dozen.....	2. 50		Dixon's.....per pound..	. 10
Tin, for cells, per sample...per dozen..	1. 00		Pokers, 20 and 24 inch.....per dozen..	. 75
Coal-hods, galvanized iron, 18-inch:			Shovels, stove:	
Open.....each..	. 34½		Short-handled.....per dozen..	. 75
Half-covered.....do...	. 49		Long-handled.....do...	1. 00
Cans, sprinkling, tin, green:			Tin:	
4-gallon.....each..	. 84		Roofing, I. C., 14 by 20.....per box..	7. 50
3-gallon.....do...	. 57		I. C., bright, 14 by 20.....do...	8. 50
2-gallon.....do...	. 43		Wire, stove.....per pound..	. 10
Dippers, retinned, quarts, stamped, per			Zinc, sheet.....do...	. 06
dozen.....	. 56			

CLASS VII.—Plumbers' material.

Gum, sheet, $\frac{1}{4}$ -inch and under:			Tees, reducing—Continued.		
Pure gum.....per pound..	\$0.56		$\frac{3}{4}$ -inch.....each..	\$0.03	
Cloth inserted.....do....	.19		1-inch.....do.....	.04	
Hose, gum, $\frac{3}{4}$ -inch, 3-ply, Goodyear's A			$4\frac{1}{2}$ -inch.....do.....	.06	
No. 1, superior.....per foot....	.08		1 $\frac{1}{2}$ -inch.....do.....	.10	
Hydrant valves.....each.....	.99		2-inch.....do.....	.18	
Hydrant-handle sockets.....do....	.14		Bushings:		
Hydrant-handle guides.....do....	.14		$\frac{3}{4}$ -inch.....do.....	.01	
Hydrant tops.....do.....	.20		1-inch.....do.....	.01	
Hydrant handles.....do.....	.20		$\frac{3}{4}$ -inch.....do.....	.01 $\frac{1}{2}$	
Hydrant journals, cast iron.....do....	.10		1-inch.....do.....	.02	
Lead, pig, Omaha and Grant, or equal to,			1 $\frac{1}{2}$ -inch.....do.....	.03	
per 100 pounds.....	4.95		1 $\frac{1}{2}$ -inch.....do.....	.03 $\frac{1}{2}$	
Packing, Seldon's.....per pound..	.43		2-inch.....do.....	.06	
Packing, jute.....do.....	.06 $\frac{1}{2}$		Plugs:		
Thimbles, brass, male or female (soldering			$\frac{3}{4}$ -inch.....do.....	.00 $\frac{3}{4}$	
nipples):			$\frac{3}{4}$ -inch.....do.....	.00 $\frac{3}{4}$	
$\frac{1}{4}$ -inch.....each.....	.05		$\frac{3}{4}$ -inch.....do.....	.01	
$\frac{3}{8}$ -inch.....do.....	.06		$\frac{3}{4}$ -inch.....do.....	.01	
1-inch.....do.....	.05		1-inch.....do.....	.01 $\frac{1}{2}$	
1 $\frac{1}{2}$ -inch.....do.....	.15		1 $\frac{1}{2}$ -inch.....do.....	.02	
1 $\frac{1}{2}$ -inch.....do.....	.18		1 $\frac{1}{2}$ -inch.....do.....	.02 $\frac{1}{2}$	
2-inch.....do.....	.29		2-inch.....do.....	.04	
2 $\frac{1}{2}$ -inch.....do.....	.30		Nipples, close or shoulder, $\frac{1}{4}$ -inch plain,		
Unions, galvanized iron, $\frac{1}{4}$ -inch, Key-			each.....	.01	
stone, or equal to.....each.....	.20		Nipples, close:		
Nipples, galvanized iron, $\frac{1}{4}$ -inch.....do....	.03 $\frac{1}{2}$		$\frac{3}{8}$ -inch.....each.....	.01	
Elbows:			$\frac{3}{8}$ -inch.....do.....	.01 $\frac{1}{2}$	
$\frac{1}{4}$ -inch.....do.....	.01		$\frac{3}{8}$ -inch.....do.....	.02	
$\frac{3}{8}$ -inch.....do.....	.01		1-inch.....do.....	.02	
$\frac{1}{2}$ -inch.....do.....	.01 $\frac{1}{2}$		1 $\frac{1}{2}$ -inch.....do.....	.02 $\frac{1}{2}$	
$\frac{3}{4}$ -inch.....do.....	.02		1 $\frac{1}{2}$ -inch.....do.....	.03 $\frac{1}{2}$	
1-inch.....do.....	.03		2-inch.....do.....	.05	
1 $\frac{1}{2}$ -inch.....do.....	.05		Nipples, long:		
1 $\frac{1}{2}$ -inch.....do.....	.06		$\frac{1}{4}$ -inch.....do.....	.01 $\frac{1}{2}$	
2-inch.....do.....	.10		$\frac{3}{8}$ -inch.....do.....	.01 $\frac{1}{2}$	
Elbows, reducing:			$\frac{1}{2}$ -inch.....do.....	.02	
$\frac{1}{4}$ -inch.....do.....	.01 $\frac{1}{2}$		$\frac{3}{4}$ -inch.....do.....	.02 $\frac{1}{2}$	
$\frac{3}{8}$ -inch.....do.....	.01 $\frac{1}{2}$		1-inch.....do.....	.03	
$\frac{1}{2}$ -inch.....do.....	.01 $\frac{1}{2}$		1 $\frac{1}{2}$ -inch.....do.....	.04	
$\frac{3}{4}$ -inch.....do.....	.03		1 $\frac{1}{2}$ -inch.....do.....	.05	
1-inch.....do.....	.04		2-inch.....do.....	.07	
1 $\frac{1}{2}$ -inch.....do.....	.05 $\frac{1}{2}$		Return bends:		
1 $\frac{1}{2}$ -inch.....do.....	.07		$\frac{3}{4}$ -inch.....do.....	.03 $\frac{1}{2}$	
2-inch.....do.....	.10		1-inch.....do.....	.06	
Tees:			1 $\frac{1}{2}$ -inch.....do.....	.10	
$\frac{1}{4}$ -inch.....do.....	.01 $\frac{1}{2}$		1 $\frac{1}{2}$ -inch.....do.....	.12	
$\frac{3}{8}$ -inch.....do.....	.02		2-inch.....do.....	.18	
$\frac{1}{2}$ -inch.....do.....	.02 $\frac{1}{2}$		Maleable-iron fittings:		
$\frac{3}{4}$ -inch.....do.....	.03		Galvanized.....per pound..	.12	
1-inch.....do.....	.05		Black.....do.....	.08	
1 $\frac{1}{2}$ -inch.....do.....	.07		Long screws, black:		
1 $\frac{1}{2}$ -inch.....do.....	.09		$\frac{1}{4}$ -inch.....each.....	.11	
2-inch.....do.....	.14		$\frac{3}{8}$ -inch.....do.....	.15	
Tees, reducing:			1-inch.....do.....	.20	
$\frac{1}{4}$ -inch.....do.....	.02		1 $\frac{1}{2}$ -inch.....do.....	.27	
$\frac{3}{8}$ -inch.....do.....	.02				

CLASS VII.—Plumbers' material—Continued.

Long screws, black—Continued.		
1½-inch.....	each..	\$0.35
2-inch.....	do.....	.46
Long screws, galvanized:		
½-inch.....	do.....	.13
¾-inch.....	do.....	.19
1-inch.....	do.....	.24
1½-inch.....	do.....	.32
1¾-inch.....	do.....	.42
2-inch.....	do.....	.55
Packing:		
Tucks, all sizes.....	per pound..	.36
Asbestos, wick.....	do.....	.20
Asbestos, sheet.....	do.....	.15
Pipe, galvanized iron, diameter—		
¾-inch.....	per foot..	.03½
1-inch.....	do.....	.04½
1½-inch.....	do.....	.05½
1¾-inch.....	do.....	.07½
2-inch.....	do.....	.10½
2½-inch.....	do.....	.13
3-inch.....	do.....	.17
Pipe, wrought iron, diameter (black):		
¾-inch.....	per foot..	.02
1-inch.....	do.....	.02
1½-inch.....	do.....	.02½
1¾-inch.....	do.....	.02½
2-inch.....	do.....	.03½
2½-inch.....	do.....	.05½
3-inch.....	do.....	.07
3½-inch.....	do.....	.09
4-inch.....	do.....	.12
4½-inch.....	do.....	.16½
Pipe, lead, best.....	per pound..	.05 ¹⁵ / ₁₀₀
Stop-cocks, brass, T handles:		
¾-inch.....	each.....	.40
1-inch.....	do.....	.50
1½-inch.....	do.....	1.00
Cocks, corporation:		
¾-inch.....	do.....	.84
1-inch.....	do.....	.64
1½-inch.....	do.....	.94
2-inch.....	do.....	1.48

NOTE.—The corporation cocks to be manufactured from metal containing the following alloy for each 100 pounds: 85.11 copper, 5.32 block tin, 7.45 zinc, 2.12 lead. Each corporation cock to be capable of withstanding a hydrostatic pressure of 75 pounds to the square inch and to be made in accordance with drawings in the water office.

Pumps, "Common Sense," with middle sections and porcelain lined, working chambers complete, same in all details as those now in use in the water department.....each.. 16.33

EXTRA PARTS OF "COMMON SENSE" PUMPS.

Middle sections.....	each.....	3.50
Top working parts.....	do.....	6.00
Handles.....	do.....	.30
Air vessels.....	do.....	2.00
Lower boxes.....	do.....	1.25
Spearhead irons.....	do.....	.20

EXTRA PARTS OF "COMMON SENSE" PUMPS—continued.

Male and female spearhead coupling-irons.....		
.....	each..	\$0.40
Wood pump rods.....	do.....	.40
Wood chamber plugs.....	do.....	.50
Solder, wiping, extra.....	per pound..	.12 ⁹⁰ / ₁₀₀
Tongs, extension, Brown's:		
No. 1½.....	per pair..	.56
No. 3.....	do.....	1.10
No. 5.....	do.....	4.00
Valves, brass, globe or angle:		
¾-inch.....	each.....	.15
1-inch.....	do.....	.19
1½-inch.....	do.....	.25
1¾-inch.....	do.....	.34
2-inch.....	do.....	.45
2½-inch.....	do.....	.70
3-inch.....	do.....	.98
3½-inch.....	do.....	1.48
4-inch.....	do.....	2.81
Valves, brass, Chapman's:		
¾-inch.....	do.....	.72
1-inch.....	do.....	.72
1½-inch.....	do.....	.75
1¾-inch.....	do.....	.99
2-inch.....	do.....	1.29
2½-inch.....	do.....	2.55
3-inch.....	do.....	3.75
3½-inch.....	do.....	5.50
Valves, brass, check:		
¾-inch.....	do.....	.13
1-inch.....	do.....	.15
1½-inch.....	do.....	.21
1¾-inch.....	do.....	.29
2-inch.....	do.....	.40
2½-inch.....	do.....	.81
3-inch.....	do.....	1.30
3½-inch.....	do.....	2.50
Valves, globe, Jenkins':		
1-inch.....	do.....	.80
1½-inch.....	do.....	1.14
1¾-inch.....	do.....	1.60
2-inch.....	do.....	2.30
2½-inch.....	do.....	4.50
3-inch.....	do.....	6.27
Valves, check, Jenkins':		
1-inch.....	do.....	.94
1½-inch.....	do.....	1.30
1¾-inch.....	do.....	1.80
2-inch.....	do.....	2.70
2½-inch.....	do.....	4.86
3-inch.....	do.....	7.38
Valves, gate, Rensselaer's or equal to:		
3 inch, bell flange.....	each..	6.05
4 inch, bell flange.....	do.....	8.25
3 inch, screw ends.....	do.....	6.00
4 inch, screw ends.....	do.....	8.20
Waste, white cotton, per sample, best		
per pound.....	.....	.08½
Buffalo extension water service boxes:		
92—D—length from 2' 2" to 3' 6".....	each.....	.98
94—F—length from 3' 5" to 5' 5".....	do.....	1.19
Buffalo extension water valve boxes, size		
C, with No. 4 base, length from 3' 3" to 4' 3".....	each..	3.40

CLASS VIII.—Groceries.

Apples, evaporated, choice, in 50-pound boxes, new.....	per pound..	\$0.08 ¹⁰ / ₁₀₀
Baking powder, Royal, 4-pound cans, per pound.....	.....	.39½
Bacon, Western shoulders.....	per pound..	.05 ¹⁰ / ₁₀₀
Brandy, per sample.....	per gallon..	1.60
Butter, New York State choice creamery, per pound.....	.....	.19
Beans, prime, per sample, New York hand-picked.....	per bushel..	1.60
Beef, dried, choice.....	per pound..	.13
Beans, lima, canned, 2-pound cans, standard.....	per dozen..	.83
Codfish, salt, Georges Bank, per pound..	.....	.03 ¹⁰ / ₁₀₀

Coffee:		
Rio, green, choice, per sample, per pound.....	.....	\$0.17 ⁷³ / ₁₀₀
Maricao, green, choice, per sample, per pound.....	.....	.18 ⁷³ / ₁₀₀
Java, roasted, best, choice, per pound.....	.....	.17
Cheese, prime, New York State cream, per pound.....		
.....	.....	.07 ⁴ / ₁₀₀
Crackers, soda, best.....	per pound..	.04 ¹⁰ / ₁₀₀
Candles, adamantine.....	do.....	.08
Currants, dried, best quality.....	do.....	.05 ¹⁰ / ₁₀₀
Cornstarch, best, in packages.....	do.....	.05½
Chocolate, best, Baker's.....	do.....	.33 ² / ₁₀₀
Cocoa, best, Baker's.....	do.....	.40

CLASS VIII.—Groceries—Continued.

Eggs, fresh	per dozen..	\$0.18 ³ / ₁₀	Raisins, best quality, London layers, 3 crown.....	per pound..	\$0.11 ³ / ₁₀
Essence of lemon, best, 2-ounce bottles, Joseph Burnett & Co.....	per dozen..	1.75	Rice, Carolina, per sample (Head).....	do....	.04 ¹ / ₁₀
Essence of vanilla, best, 2-ounce bottles, Joseph Burnett & Co.....	per dozen..	2.60	Sugar:		
Flour:			Brown, light, per sample (Keystone, C)	per pound..	.05 ⁷ / ₁₀₀
Extra, per sample	per barrel..	3.45	Granulated (Standard, Franklin), per pound	do....	.06 ³ / ₁₀₀
Patent process (Ceres, or equal to), per barrel	do....	5.34	White, powdered (Franklin), per pound	do....	.07 ¹ / ₂
Family, best, per sample, per barrel..	do....	4.35	Salt:		
Buckwheat, choice	per pound..	.02 ¹ / ₂	Fine, 56 pounds to bushel, per bushel.....	do....	.28 ² / ₁₀
Graham.....	do....	.02 ¹ / ₂	Ground alum, 56 pounds to bushel, per bushel.....	do....	.21
Ginger, ground, Jamaica (Colburn's choicest).....	per pound..	.11	Soda:		
Ham, smoked	do....	.10 ² / ₁₀	Sal	per pound..	.01 ² / ₁₀
Herring, large prime split	per barrel..	3.39	Cooking, bicarbonate.....	do....	.03 ³ / ₁₀
Hops, loose.....	per pound..	.29	Starch, per sample	do....	.03 ¹ / ₁₀
Hominy.....	do....	.01 ¹ / ₁₀	Soap:		
Lard, refined, best (Cassard's).....	do....	.06 ¹ / ₂	Toilet, best, per sample (Kirk & Co.'s) per dozen cakes	do....	.65
Lye, concentrated, 1-pound cans, per sample (Red Seal).....	per can..	.08 ² / ₁₀	Castile, genuine mottled, per sample, per pound	do....	.05 ² / ₁₀
Molasses, per sample (prime Porto Rico), per gallon	do....	.22 ⁷ / ₁₀	Hard, light, per sample	per pound..	.02 ² / ₁₀₀
Matches:			Laundry, (Weaver, Kengla & Co., per sample or equal to).....	per pound..	.04 ¹ / ₁₀
Swift & Courtney, full 200 to the box (Blue Hen).....	per gross..	1.61	Pear's toilet, scented, 30 per cent glycerine.....	per dozen cakes..	1.49 ¹ / ₂
Best blue heads	do....	.56	Babbitt, best, $\frac{3}{4}$ -pound cakes, per cake.....	do....	.04 ¹ / ₁₀₀
Macaroni.....	per pound..	.07	Sirup, per sample	per gallon..	.23
Mustard, pure, per sample (Colburn's choicest).....	per pound..	.12	Tea:		
Meal, corn, white, family	per bushel..	.41	Green, per sample	per pound..	.21
Malt.....	do....	1.39	English breakfast, best	do....	.30
Meal, oat, Muscatine	per pound..	.02 ² / ₁₀	Per sample, Japan, uncolored.....	do....	.21 ¹ / ₁₀
Mackerel, No. 1	do....	.07 ¹ / ₂	Black, per sample	do....	.19 ¹ / ₂
Oil, astral (Pratt's, with cans, or equal to) per gallon	do....	.17	Tobacco, chewing, per sample (B. F. Hanes' 3-ply or equal to), per pound.....	do....	.28 ² / ₁₀₀
Oil, illuminating, 150 test, prime water, white	per gallon..	.09	Tomatoes, canned, 3-pound cans (Hous-ton's).....	per dozen..	.79
Onions, prime.....	per bushel..	1.20	Tallow	per pound..	.09
Potatoes:			Vinegar, best (Elmer's Golden Russet), per gallon	do....	.09 ¹ / ₂
Irish, prime	do....	.57	Whisky, per sample.....	per gallon..	1.70
Sweet, best	per barrel..	2.25	Wine:		
Pickles, cucumbers (1800).....	per 100..	.49	Sherry, genuine Spanish	do....	1.00
Pepper, black, ground, pure, per sample (Colburn's choicest).....	per pound..	.11	Port	do....	.90
Prunes, best quality (Turkish).....	do....	.04 ⁴ / ₁₀			
Peaches, canned, 3-pound cans (Hous-ton's standard)	per dozen..	2.25			
Peas, canned, 2-pound cans, early June (Schrivver's).....	per dozen..	1.32			

CLASS IX.—Boots and shoes.

Shoes:			Shoes—Continued.		
Children's, for Washington Asylum, per sample, 4 to 10 $\frac{1}{2}$	per pair..	\$0.54	Women's, lasting polish, 3 to 9.....	per pair..	\$0.60
Misses', per sample, 11 to 2.....	do....	.68	Boys', per sample, 1 to 5.....	do....	.75
Men's, for Washington Asylum, metal-pegged brogan, per sample, 6 to 14, per pair	do....	.74	Shoe strings:		
Men's, for Washington Asylum, metal-pegged brogan, per sample, 6 to 14, per pair	do....	.90	Leather, per sample	per 100..	.29
Women's, for Washington Asylum, per sample, 3 to 9	per pair..	.80	Linen, per sample	do....	.24
Women's, for Washington Asylum, per sample, 3 to 9.....	per pair..	1.05	Slippers, women's, per sample	per pair..	.69
			Boots, rubber, men's:		
			Short leg, per sample	do....	2.00
			Long leg, per sample (Goodyear Rubber Co., New York).....	per pair..	3.40
			Long leg, per sample (Rubber Footwear Co., Boston).....	per pair..	2.80

CLASS X.—Drugs.

Acid:			Acid—Continued.		
Acetic (Powers & Weightman), per pound	do....	\$0.08	Oxalic	per pound..	\$0.12
Benzoic (Powers & Weightman), per ounce	do....	.09	Pyrogalic	per ounce..	.30
Boracic (Wyeth).....	per pound..	.45	Phosphoric, concentrated (Powers & Weightman).....	per pound..	.40
Chromic	per ounce..	.16	Salicylic (Powers & Weightman), per ounce	do....	.10
Carbolic, Calvert's, No. 4, per pound ..	do....	.46 ¹ / ₂	Tannic (tannin) (Powers & Weightman).....	per ounce..	.09
Carbolic, crystallized	do....	.51	Hydrocyanic (Powers & Weightman), per ounce	do....	.14
Carbolic (commercial)	do....	.07 ¹ / ₂	Muriatic, C. P. (Powers & Weightman).....	per pound..	.18
Citric (Powers & Weightman).....	do....	.48			
Nitric, C. P. (Powers & Weightman), per pound	do....	.20			

CLASS X.—*Drugs*—Continued.

Acid—Continued.

Acid—Continued.		
sulphuric, aromatic	per pound	\$0.33
Acacia, pulverized (gum arabic)	do.	.80
Acetate of lead (Powers & Weightman), per pound		.20
Aqua ammonia, concentrated, per gallon		.45
Alum, pulverized	per pound	.07
Ammon., carb. (Squibbs')	do.	.33
Aqua cinnamon	per gallon	.25
Ammon., bromid. (Powers & Weight- man)	per ounce	.04
Ammonia, iodide (Powers & Weightman), per ounce		.37
Ammon., muriat., granulated (Powers & Weightman)	per pound	.23
Ammon., spirits, aromatic	per pound	.35
Amyl, nitras (Squibbs')	per ounce	.30
Antifebrin	do.	.25
Antipyrin	do.	1.43
Alcohol, 95 per cent	per gallon	2.25
Argent, nitrat:		
Pure crystal	per ounce	.70
Lunar caustic	do.	.70
Asafetida, pulverized	per pound	.30
Atropia, sulph. (Powers & Weightman), per dram		.54
Balsam, Peru	per pound	1.20
Balsam tolu	do.	.40
Bromine	per ounce	.16
Boxes:		
Pill, assorted sizes, paper	per gross	.30
Ointment, wooden, all sizes, best, per gross		.60
Powder, paper	per gross	.75
Bottles, assorted:		
8-ounce and under	per gross	2.00
9 to 16 ounces	do.	5.20
Bismuth:		
Subnit. (Squibbs')	per ounce	.16
Subiodide	do.	.35
Borax:		
Pulverized	per pound	.12
Lump	do.	.11
Bromo-caffeine, 4-ounce bottle (Keasby & Mattison)	per bottle	.73
Calomel triturates (Sharp & Dohme), per 100		.10
Carbon, bisulph	per pound	.16
Capsules, 100 to a box, assorted	per box	.09
Capsicum, powdered	per pound	.18
Cerate, simple	do.	.34
Collodion	per ounce	.06
Columbo, pulverized	per pound	.18
Cantharides, powdered	do.	1.25
Chloride of lime, in pound boxes, per pound		.09
Chloride of gold	per grain	.03 ¹⁵
Chloral, hydrate (Powers & Weightman), per pound		1.40
Chloroform (Squibbs'), C. P.	per pound	1.00
Cinchonidine sulphur (Powers & Weight- man)	per ounce	.10
Copaiba, balsam	per pound	.60
Cinchonidia sulphur (Powers & Weight- man)	per ounce	.10
Corks, vial, assorted	per gross	.15
Charcoal, willow	per pound	.15
Cosmoline	do.	.21
Cotton, absorbent (Seaburry & Johnson), per pound		.40
Cocoa butter	per pound	.48
Dextrin	do.	.12
Digitalis, powdered	do.	.22
Emplastrum:		
Adhesive, rubber, Mead's, 1 inch in width, on spools	per spool	.35
Adhesive, rubber, Mead's, 2 inches wide, on spools	per spool	.50
Belladonna, 5 inches wide	per yard	.35
Cantharides	do.	.75
Elixir ammon. val.	per gallon	2.75
Elixir lactopeptine	per pound	.90
Ether (Squibbs'), C. P.	do.	1.08
Extracts:		
Aconite, fld.	per ounce	.08

Extracts—Continued.

Buchu, fld. (Sharp & Dohme), per pound.....	\$0.98
Belladonna, fld. (Sharp & Dohme), per pound.....	.98
Cinchona, comp., fld. (Sharp & Dohme), per pound.....	1.25
Colocynth, comp. (Squibbs'), per ounce.....	.35
Canabis ind., fld. (Sharp & Dohme), per ounce.....	.12
Digitalis, fld. (Squibbs') .. per ounce..	.08
Ergot, fld. (Squibbs')..... per pound..	1.65
Ginger, Jamaica. fld. (Sharp & Dohme)..... per pound..	.95
Glycyrrhiza, fld..... do.....	.68
Ipecac, fld. (Sharp & Dohme), per ounce.....	.24
Glycyrrhiza, pulverized. per pound..	.35
Gentian, comp., fld. (Sharp & Dohme), per pound.....	.87
Henbane (Sharp & Dohme), solid, per ounce.....	.20
Sarsaparilla, co. fld. (Sharp & Dohme)..... per pound..	.99
Stramonium, solid..... per ounce..	.18
Uva ursi, fld. (Sharp & Dohme), per ounce.....	.05
Nucis vomicae, solid..... per ounce..	.35
Jaborandi, fld. (Sharp & Dohme), per ounce.....	.10
Pink root and senna, fld. (Sharp & Dohme)..... per ounce..	.08
Wild cherry, fld..... do.....	.05
Quebracho, fld. (Sharp & Dohme), per pound.....	1.75
Viburnum prunifolium, fld. (Sharp & Dohme)..... per pound..	.82
Valerian, fld. (Sharp & Dohme), per ounce.....	.06
Cascara sagrada, solid .. per ounce..	.27
Cascara sagrada, fld. (Sharp & Dohme), per ounce.....	.07
Quassia, fld. (Sharp & Dohme), per ounce.....	.05
Rhatany, fld. (Sharp & Dohme, per ounce.....	.06
Arnica flowers, fld. (Sharp & Dohme), per ounce.....	.06
Cardamom seed, co., fld. (Sharp & Dohme)..... per ounce..	.09
Catechu, fluid (Sharp & Dohme), per ounce.....	.05
Corn-silk, fld. (Sharp & Dohme), per ounce.....	.07
Ferri:	
Sulphas (copperas)..... per pound..	.01
Pyrophosphate (Squibbs'), per ounce.	.05
Funnels, glass, 8 to 32 ounces..... each..	.25
Gentian, pulverized..... per pound..	.10
Gelatin, Nelson's..... per pound..	.65
Ginger, powdered..... do.....	.16
Graduated glasses, 1 to 16 ounce .. each..	.34
Glycerin, pure (Gordon's)..... per pound..	.20
Glycyrrhiza comp., pulverized, per pound.....	.30
Gum, benzoin..... per pound..	.50
Gum, camphor (Pfizer)..... do.....	.43
Gum, tragacanth..... do.....	.50
Hypophosphate of lime (Powers & Weightman)..... per pound..	1.05
Hypophosphate of soda (Powers & Weightman)..... per pound..	1.10
Hypophosphate of potass. (Powers & Weightman)..... per pound..	1.10
Hydrochlorate of cocaine (Squibbs's) per grain.....	.01
Hydrarg., chlor. mit. (English) per ounce.....	.09
Honey, best, strained.....	.15
Iodoform, pulverized (Powers & Weightman)..... per pound..	4.35
Iodine, resublimed (Powers & Weightman)..... per ounce..	.25
Kramaria, pulverized..... per pound..	.20

CLASS X.—*Drugs*—Continued.

Lycopodium.....per ounce..	\$0.05	Salicine.....per ounce....	\$0.15
Licorice root, pulverized.....per pound..	.12	Soda:	
Lini farini, pulverized (flaxseed meal)		Bromid.....per pound..	.45
per pound.....	.05	Bicarb.....do.....	.04
Liquor:		Salicyl. (Powers & Weightman).....per	
Potass. arsen. (Fowler's solution) per		pound.....	1.35
pound.....	.10	Potass., tart, Rochelle salts (Powers	
Ferri chlor. for tinct.....per ounce..	.05	& Weightman).....per pound..	.30
Potass.....do.....	.04	Soap:	
Lactopeptine.....do.....	.65	Castile, white, Conti's best.....per	
Listerine.....per bottle..	.70	pound.....	.12½
Morphine, sulph., in 1-ounce bottles		Spanish, mottled.....per pound..	.05
(Powers & Weightman).....per ounce..	2.85	Carbolic.....do.....	.12
Magnes., sulph. (epsom salts).....per		Skins, chamois, 25 by 33 inches.....each..	.38
pound.....	.01½	Spatulas, assorted.....per dozen..	2.50
Opii, pulverized, powdered opium		Sulphur, pulverized.....per pound..	.04
(Squibbs's).....per ounce..	.41	Spermaceti.....do.....	.35
Oil:		Sponge:	
Almond, sweet.....per ounce..	.05	Sheep's wool (Florida).....do.....	1.78
Of bitter almonds.....do.....	.25	Surgeons', silk.....do.....	2.50
Bergamot.....do.....	.17	Spt. ether, comp., Hoffman's anodyne	
Anise.....do.....	.12	(Powers & Weightman).....per pound..	.50
Ol. cinnamon.....do.....	.09	Sulphonol.....per ounce..	1.38
Ol. copaib.....do.....	.09	Spt. niter dul., sweet spirits niter (Pow-	
Oil of cloves.....do.....	.10	ers & Weightman).....per pound..	.40
Oil of myrcia.....do.....	.25	Spt. laven., Co.....do.....	.34
Ol. limonis.....do.....	.09½	Sirup:	
Oil of neroli.....per drachm..	.25	Ferri, iodidi.....do.....	.35
Oil of orange peel.....per ounce..	.12	Scilla (squills).....do.....	.16
Oil of pimento.....do.....	.15	Pruni virg. (wild cherry).....do.....	.20
Ol. ricini (castor oil).....per gallon..	1.30	Strychnia, sulph.....per drachm..	.15
Oil of lavender.....per ounce..	.12	Santonine (Powers & Weightman), per	
Oil of peppermint.....do.....	.18	ounce.....	.32
Ol. olivar (olive oil).....per gallon..	.70	Trypsin.....do.....	2.00
Ol. morrhue (cod-liver oil).....do.....	.80	Tincture:	
Ol. rosemary.....per ounce..	.05	Aloes.....do.....	.03½
Oil of rose.....per drachm..	.40	Lobelia.....do.....	.03½
Oil, sandal.....per ounce..	.18	Asafetida.....do.....	.04
Oil origanum.....per pound..	.40	Aconit., R.....do.....	.04
Oleate of mercury.....per ounce..	.15	Arnica.....per gallon..	1.04
Ointment of tar.....do.....	.04	Digitalis.....per ounce..	.04
Potass.:		Orris.....do.....	.04
Bitart. (Powers & Weightman) per		Gentian, Co.....per pound..	.25
pound.....	.32	Guaiac.....per ounce..	.05
Iodidi (Powers & Weightman) per		Tablets, hypodermic:	
pound.....	2.70	Of ergotin, 100 tablets in bottle	
Citrate.....per pound..	.50	(Sharp & Dohme), ½ grain.....per	
Chlor., crys. (Powers & Weightman)		bottle.....	.54
per pound.....	.18	Sulph. of morphia (Sharp & Dohme),	
Bicarb. (Powers & Weightman) per		100 in bottle, ½ and ¼ grain per bot-	
pound.....	.15	tle.....	.36
Bromid. (Powers & Weightman) per		Sulph. of atropia (Sharp & Dohme),	
pound.....	.35	100 in bottle, ½ grain.....per bottle..	.35
Permanganate (Powers & Weight-		Apomorphia (Sharp & Dohme), 100 in	
man).....per pound..	.40	bottle, ½ grain.....per bottle..	.75
Pill, atropia (Sharp & Dohme).....per 100..	.30	Aconitine (Sharp & Dohme), 100 in	
Pill, cathr., comp., sugar-coated (Sharp &		bottle, ½ grain.....per bottle..	.60
Dohme).....per pound..	1.10	Digitaline (Sharp & Dohme), pure,	
Pill, aloin, strych. et bellad., No. 2 (Sharp		100 in bottle, ½ grain.....per bottle..	.50
& Dohme).....per 100..	.27	Morp. atrop, Nos. 1 and 4 (Sharp &	
Pill, podophyllin, co. (Sharp & Dohme),		Dohme), 100 in bottle.....per bottle..	.55
per 100.....	.32	Pilocarpine muriate, 100 in bottle, ½	
Pill, neuralgic (Brown-Sequard), S. & D.		grain.....per bottle..	.95
per 100.....	.68	Tincture:	
Paper, white, blue, and red.....per ream..	2.25	Iodini.....per pound..	.55
Plasters:		Myrrhæ.....do.....	.45
Allcock's porous.....per dozen..	1.10	Nux vom.....do.....	.35
Mustard, "strong," J. & J.....per		Opii (laudanum).....do.....	.65
dozen.....	.20	Vaseline.....do.....	.25
Podophyllin.....per ounce..	.22	Valerian, powdered.....do.....	.23
Powder:		Ung. hydrarg, 10 per cent.....do.....	.50
Disinfectant, Egyptian carbolic.....per		Vinum antimonii.....do.....	.25
pound.....	.10	Ung. hydrarg., nitras.....per ounce..	.04
Disinfectant, Robacher's Peerless, 1-		Wax, best white.....per pound..	.52
pound boxes.....per dozen boxes..	3.25	Wine of tar.....do.....	.30
Insect, Persian, light.....per pound..	.33	Zinc:	
Quinine, sulph. (Powers & Weightman),		Chloride (Powers & Weightman)	
per ounce.....	.37	per pound.....	.35
Quinidia, sulph. (Powers & Weightman),		Oxide (Squibbs's).....per pound..	.25
per ounce.....	.45	Sulph. (Squibbs's).....do.....	.28
Rhubarb, powdered.....per pound..	.60	Zingiberis, jam, pulverized.....do.....	.22
Refined wood, naphtha.....do.....	.25		

CLASS XI.—Glass, paints, and varnish.

Alcohol, 95 per cent.....per gallon..	\$2.25	Red vermilion—Continued.	
Asphaltum	.50	American, dry.....per pound..	\$0.15
Benzine.....do.....	.12	English, in oil.....do.....	.85
Brown:		Red, Indian:	
Spanish, dry.....per pound.....	.01½	Dry.....do.....	.07
Burnt sienna, dry.....do.....	.05	In oil.....do.....	.13
Burnt sienna, in oil.....do.....	.12	Red Venetian:	
Burnt umber, dry.....do.....	.04½	In oil.....do.....	.09
Burnt umber, in oil.....do.....	.12	Dry.....do.....	.01½
Prince's metallic, dry.....do.....	.01½	Rottenstone, powder.....do.....	.05
Black, lamp:		Rosin, N. C.....do.....	.01½
In papers, dry.....do.....	.08	Spirits of turpentine.....per gallon..	.42
"Eddie's refined," in papers, dry		Varnish:	
.....per pound.....	.21	No. 1 coach.....do.....	1.50
Black paint, in oil.....do.....	.11	Coach, wearing body.....do.....	3.25
Black coach, in oil.....do.....	.12	Furniture (turpentine).....do.....	.80
Blue:		Damar.....do.....	1.40
Ultramine, dry.....do.....	.09	Pure shellac.....do.....	2.60
Ultramarine, in oil.....do.....	.19	Whiting.....per pound.....	.01½
Prussian, dry.....do.....	.30	Wicking, lamp, cotton.....do.....	.25
Prussian, in oil.....do.....	.30	Wicks, lamp:	
Brushes:		No. 0.....per gross.....	.30
Paint, Clinton's, 5-0.....each.....	.90	No. 1.....do.....	.30
Paint, Clinton's, 6-0.....do.....	1.08	No. 2.....do.....	.35
Wall, Clinton's, 3-inch.....do.....	.30	Yellow, chrome:	
Wall, Clinton's, 3½ inch.....do.....	.42	Extra dry.....per pound.....	.12
Wall, Clinton's, 4-inch.....do.....	.60	No. 1, in oil.....do.....	.15
Wall, Clinton's, 4½-inch.....do.....	.75	Yellow French ocher:	
Wall, Clinton's, 5-inch.....do.....	.97	In oil.....do.....	.09
Sash tools, No. 6.....do.....	.14	Dry.....do.....	.01½
Sash tools, No. 7.....do.....	.19	Glass, equal to Chesapeake brand, as fol-	
Sash tools, No. 8.....do.....	.23	lows:	
Sash tools, No. 9.....do.....	.27	8 by 10.....per light.....	.03
Sash tools, No. 10.....do.....	.30	8 by 20.....do.....	.07
Chimneys, lamp:		9 by 12.....do.....	.04
No. 1.....per dozen.....	.35	9 by 14.....do.....	.05
No. 2.....do.....	.45	9 by 18.....do.....	.06½
Driers:		10 by 12.....do.....	.04½
Patent liquid.....per gallon.....	.28	10 by 14.....do.....	.05
Japan.....do.....	.50	10 by 16.....do.....	.06
Litharge.....per pound.....	.08	10 by 18.....do.....	.07
Glaziers' points.....per package.....	.07	10 by 20.....do.....	.08
Green:		10 by 22.....do.....	.08½
Chrome, dry.....per pound.....	.05½	10 by 24.....do.....	.09
Chrome, in oil, best.....do.....	.12	12 by 12.....do.....	.05
Imperial French, dry.....do.....	.10	12 by 14.....do.....	.07
Imperial French, in oil.....do.....	.14	12 by 16.....do.....	.07
Paris, dry.....do.....	.18	12 by 18.....do.....	.08
Glue:		12 by 20.....do.....	.09
Common.....do.....	.10	12 by 23.....do.....	.10
White.....do.....	.17	12 by 26.....do.....	.14
Irish.....do.....	.12	12 by 24.....do.....	.14
Liquid, Le Page's.....per pint.....	.37	12 by 28.....do.....	.14½
Gum shellac.....per pound.....	.25	12 by 32.....do.....	.18
Hard oil finish, walnut.....per gallon..	1.00	12 by 33.....do.....	.19
Lead, Lewis's white, in oil.....per pound..	.06½	14 by 14.....do.....	.07
Naphtha.....per gallon.....	.12	14 by 16.....do.....	.09
Oil:		14 by 18.....do.....	.10
Sperm.....do.....	.73	14 by 20.....do.....	.11
Linseed, raw.....do.....	.58	14 by 21.....do.....	.11
Linseed, boiled.....do.....	.59	14 by 22.....do.....	.11
Lard, winter-strained.....do.....	.53	14 by 24.....do.....	.13
Neat's-foot.....do.....	.57	14 by 26.....do.....	.15
Cylinder, 600 W., dark color, Vacuum		14 by 28.....do.....	.18
Oil Co., Rochester, N. Y., or equal to,		14 by 30.....do.....	.20
per sample submitted.....per gallon.....	.60	16 by 16.....do.....	.11
Cylinder, valvoline, Leonard & Ellis,		16 by 18.....do.....	.12
or equal to, per samples submit-		16 by 20.....do.....	.12½
ted.....per gallon.....	.35	16 by 22.....do.....	.13
Cylinder, U. S. Navy standard, per		16 by 26.....do.....	.19
samples submitted.....per gallon.....	.50	16 by 32.....do.....	.23
Machine.....do.....	.30	18 by 20.....do.....	.14
Engine, vacuoline, Vacuum Oil Co.,		18 by 30.....do.....	.23
Rochester, N. Y., or equal to, per		18 by 36.....do.....	.31
samples submitted.....per gallon.....	.40	18 by 38.....do.....	.36
Plaster of Paris.....per barrel.....	1.65	20 by 20.....do.....	.21
Putty:		20 by 24.....do.....	.23
White.....per pound.....	.01½	20 by 28.....do.....	.25
Colored.....do.....	.02½	22 by 24.....do.....	.23
Plumbago.....do.....	.05	22 by 44.....do.....	.60
Red lead:		22 by 46.....do.....	.65
Dry.....do.....	.06½	24 by 30.....do.....	.36
In oil.....do.....	.10	28 by 28.....do.....	.42
Red, vermilion:			
English, dry.....do.....	.65		

CLASS XII.—Lumber.

Ash: all widths and lengths, prime:			Shingles, No. 1, cypress heart, width 6 inches, length 20 inches (sawed), per M	\$7.50
4-4.....per M..	\$45.00		Siding:	
8-4.....do....	45.00		5-8, white pine, 1st and 2d quality, per M.....	19.00
Cedar posts:			5-8, white pine, barn quality per M..	17.50
8 feet long, 7 inches in diameter at large end.....each..	.26		Stepping, 5-4, heart, Florida.....do...	31.50
10 feet long, 8 inches in diameter at large end.....each..	.40		Stakes, oak, 1½ inches square by 12 inches long, sharpened at one end....per M..	7.50
each additional foot over 10 feet per foot.....	.04		Virginia pine:	
Cherry, prime, ½-inch, all widths and lengths.....per M..	93.00		4-4, culls, 7 inches wide and over, 12, 14, and 16 feet long.....per M..	11.50
Dressing, 1 or 2 sides.....do....	4.00		4-4, stock, culls, 1x12.....do....	13.75
Flooring:			Selects, 6-4.....do....	19.00
N. C., 4-4 and 5-4, No. 1, 3½ inches and under.....per M..	21.00		Timber, all sizes, 30 feet and under, per M.....	15.00
White pine, 5-4 and 4-4, selects, No. 1.....per M..	37.00		Clear, 8-4 and under.....per M..	14.75
Georgia or Florida, 4-4 and 5-4, heart, No. 1, 3½ inches and under...per M..	27.50		White pine:	
Georgia pine, clear heart, 8-4 and under (all lengths and widths).....per M..	25.00		4-4, fine common, dressed, 2 sides, per M.....	34.00
Joists and scantling, Virginia pine:			5-4, fine common, dressed, 2 sides, per M.....	37.50
All sizes, 16 feet and under in length, per M.....	12.95		6-4, fine common, dressed, 2 sides, per M.....	37.50
All sizes, 18 to 24 feet long...per M..	14.00		8-4, fine common, dressed, 2 sides, per M.....	37.50
Joists, scantling, and timber:			4-4, Michigan, selects, dressed, 2 sides, per M.....	39.00
White pine, all sizes, under 30 feet in length.....per M..	29.00		4-4, Michigan, selects, partition stuff, 3½ inches wide.....per M..	38.00
White pine, all sizes, 20 feet in length and over.....per M..	35.00		5-4, Michigan, selects, dressed, 2 sides, per M.....	42.50
Georgia pine, all sizes, under 22 feet in length.....per M..	23.00		6-4, Michigan, selects, dressed, 2 sides, per M.....	42.50
Georgia pine, all sizes, 22 feet to 35 feet long.....per M..	26.00		8-4, Michigan, selects, dressed, 2 sides, per M.....	42.50
Laths, 4 feet, spruce.....do....	2.60		4-4, culls (stock), dressed, 2 sides, per M.....	18.70
Oak plank, white oak, 2 and 3 inch (prime) any length under 22 feet.....per M..	27.50		4-4, culls (stock), not dressed, per M..	18.40
Oak timber, white oak, 12x12 and under, less than 22 feet long.....per M..	24.00		6-4, culls (stock).....do....	19.75
Oak plank, 2 and 3 inch (sound, common bridge, white oak), any lengths required.....per M..	21.50		8-4, 1st and 2d, clear, Michigan inspection, dressed, 2 sides...per M..	50.00
Poplar, all widths and lengths, prime:			6-4, 1st and 2d, clear, Michigan inspection, dressed, 2 sides...per M..	50.00
5-4.....per M..	29.00		4-4, 1st and 2d, clear, Michigan inspection, dressed, 2 sides...per M..	49.00
4-4.....do....	28.00			
5-8.....do....	25.00			
12-4.....do....	33.00			
½-inch.....do....	24.00			
8-4.....do....	33.00			

CLASS XIII.—Forage.

Bran (20 pounds to the bushel), per 100 pounds.....	\$0.74	the bushel.....per pound..	\$0.04
Corn, shelled and cleaned (56 pounds to the bushel).....per bushel..	.46	Oats, prime, white, recleaned (no new oats received, 32 pounds to the bushel) per bushel.....	.34
Corn, in ear (35 pounds to the bushel) per bushel.....	.25	Shorts, (28 pounds to the bushel), per 100 pounds.....	.73
Hay, long timothy, prime (net weight), per 100 pounds.....	.67½	Straw, long rye, bright, per 100 pounds..	.65
Hay, cut, prime (net weight) per 100 pounds.....	.72½	Rye, chop (28 pounds to the bushel) per 100 pounds.....	.84
Meal, corn (48 pounds to the bushel) per 100 pounds.....	.84	White middlings (35 pounds to the bushel).....per 100 pounds..	.84
Meal, flaxseed, best quality (32 pounds to the bushel).....per bushel..		Rock salt, lump.....per pound..	.00½

CLASS XIV.—Fresh meat and corned beef.

Fresh beef:		Corned beef, best quality.....per pound..	\$0.01½
Roasts, best quality.....per pound..	\$0.09	Mutton, best quality, in sides.....do....	.07
Round, best quality.....do....	.07	Lamb, best quality, in quarters.....do....	.10
Steaks, sirloin, best quality.....do....	.11		
Cuts, other than above specified, per pound.....	.01½		

CLASS XV.—Lamp-posts and miscellaneous castings.

Lamp-posts, present pattern, 280 pounds, with flanges and arms, including one coat of red-lead paint, arms to be tapped and drilled for two bolts.....each..	\$5.90	Miscellaneous castings—alley grates, drops, man-hole frames and covers, pump grates, and all other castings which may be ordered by Commissioners, District of Columbia, as per samples, patterns, or drawings to be furnished from time to time...per pound..	\$0.01½
		Man-hole irons, wrought iron.....each..	.09

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CLASS XVI.—Fuel.

Coal:

Cumberland (run of mine) . . . per ton . . .	\$3. 19
Splint . . . do . . .	6. 40
Red-ash, egg . . . do . . .	5. 23
Red-ash, stove . . . do . . .	5. 29
White-ash, furnace . . . do . . .	4. 90
White-ash, egg . . . do . . .	5. 05
White-ash, stove . . . do . . .	5. 24
White-ash, chestnut . . . do . . .	5. 10
Lyken's Valley, stove . . . do . . .	5. 69

Wood:

Oak, long per cord . . .	\$4. 90
Oak, sawed and split . . . do . . .	5. 89
Pine, long do . . .	4. 09
Pine, sawed and split . . . do . . .	5. 25
Prices for stowing coal (about 6,000 tons), per ton	. 15
Prices for stowing wood (about 450 cords) per cord . . .	. 40

CLASS XVII.—Dry goods.

Blankets:

10-4, woolen, white, five pounds, Sax- onville or equal to . . . per pair . . .	\$3. 16
Colored, wool, per sample . . . do . . .	1. 86

Buttons:

For shirts, porcelain, No. 20, per gross	. 05
For drawers, porcelain, No. 30, per gross	. 05½
For coats, horn, black . . . per gross . . .	. 15
For pants, metal do . . .	. 05½

Bedspreads, white, per sample . . . each . . .	. 99
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Calico:

As per sample, American mills, per yard	. 05 ⁴⁹ / ₁₀₀
Shirting, per sample . . . per yard . . .	. 04½
Crash toweling, 20-inch, per sample, per yard	10

Cotton:

Unbleached, 4-4 wide, Darlington, per sample per yard . . .	. 06 ¹⁴ / ₁₀₀
Sheeting, bleached, 6-4 wide, fruit of loom, per sample . . . per yard . . .	. 14
Sheeting, bleached, 4-4 wide, fruit of loom, per sample . . . per yard . . .	. 08 ⁹ / ₁₀
5-4 wide, bleached, per sample, Pa- cific Mills per yard . . .	. 10
5-4 wide, unbleached, per sample, Continental per yard . . .	. 09½
42-inch, unbleached, Continental, per sample per yard . . .	. 09
10-4, bleached, per sample, Lock- wood per yard . . .	. 22
Unbleached, yard wide, for women's underclothing, per sample, Pil- grim per yard . . .	. 06½
Cheese cloth, 4-4, Monarch, B. B., for bandages, per sample . . . per yard . . .	. 03
4-4, Calvert, B. B., for bandgages, per sample per yard . . .	. 05½

Cotton—Continued:

Spool, Clark's per dozen . . .	\$. 41 ⁸⁵ / ₁₀₀
Flannel:	
Wool, red, per sample, "A. B.," per yard	. 21
Wool, white, per sample . . . per yard . . .	. 24
Wool, gray, per sample, Dover, per yard	. 21
Cotton, "A," S. & C., per sample, per yard	. 08
Gingham, per sample:	
Foil du Nord, 26 inch . . . per yard . . .	. 08½
Bates' Mills, Dresden . . . do . . .	. 06½
Hose, women's:	
Cotton, per sample per pair . . .	. 06½
Wool, per sample do . . .	. 16½
Blue mixed, per sample . . . do . . .	. 07½
Hose, children's, per sample . . . do . . .	. 07½
Kentucky Jeans, per sample . . . per yard . . .	. 11½
Needles, assorted sizes . . . per paper . . .	. 02½
Melton, per sample, for almshouse men, per yard	. 34
Pillow slips, any size each . . .	. 12
Prison cloth, 6-4 wide, stripe 1½ inch wide, woolen, per sample . . . per yard . . .	. 72½
Pins per paper . . .	. 01
Sheets:	
8-4 wide, 2½ yards long each . . .	. 45
10-4 wide, 2½ yards long . . . do . . .	. 59
Socks, men's:	
Woolen, per sample per pair . . .	. 11
Cotton, per sample do . . .	. 08
Shirting, hickory, per sample, 28 inch, Uncasville per yard . . .	. 07½
Thread, brown, black, and white, linen, best (spools) per dozen	. 80
Ticking for bedsacks, 4-4 wide, Omega, A. C. A., per sample . . . per yard . . .	. 13½
Towels, per sample per dozen . . .	2. 40

CLASS XVIII.—Ice.

Ice (best Kennebec, or equal to) per 100 pounds . . .	\$0. 70
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CLASS XIX.—Telegraph and telephone supplies.

Sulphate of copper (blue stone), best quality per pound . . .	\$0. 05½
Sal ammonia, best do . . .	. 08 ⁹ / ₁₀
Sheet copper, No. 30 (Brown & Sharp's gauge), cut in strips to order . . . per pound . . .	. 27
Molded zincs:	
(Amalgamated) for Le Clanche bat- tery each . . .	. 04½
Crowfoot per pound . . .	. 07 ⁹ / ₁₀
Le Clanche porous cells, charged . . . per cell . . .	. 29
Glass jars, No. 1:	
5 by 7 inches each . . .	. 13
6 by 8 inches do . . .	. 20
Le Clanche battery, complete . . . do . . .	. 52
The Burnley dry battery . . . do . . .	. 60
Cold-drawn copper wire, No. 12. per pound . . .	. 21
Galvanized iron wire, extra best, best quality:	
No. 9 per pound . . .	. 05 ³ / ₁₀
No. 12 do . . .	. 05 ⁹ / ₁₀
Copper wire, Okonite insulation:	
No. 16 per foot . . .	. 01 ⁷ / ₁₀
No. 12 do . . .	. 02 ⁴ / ₁₀
Office wire (copper), wound and braided, paraffined and polished:	
No. 16 per pound . . .	. 28

Office wire (copper), wound and braided, paraffined and polished—Continued.	
No. 18 per pound . . .	\$0. 28
Copper wire, two-conductor annunciator, No. 16 per foot . . .	. 33
Copper wire, twin Okonite cable:	
No. 12 per foot . . .	. 04½
No. 14 do . . .	. 03 ⁸ / ₁₀
No. 16 do . . .	. 02 ⁹ / ₁₀
Register paper, cut and wound on spools to order per pound . . .	. 14
Double telephone cords:	
Tips complete each . . .	. 15
Short do . . .	. 15
Glass screw (insulators), Western Union, per hundred	3. 05
Brackets, screw, oak, painted, per hun- dred	1. 25
Double-pointed (telegraph) tacks, per pound	. 14
Cross arms, 3½ by 4½, best white pine, painted, with pins, complete, per lineal foot	. 07
Screw bolts, with washers, ½ inch by 7 inch per hundred . . .	2. 22
Climbers, extra spring steel, with straps (Stubbs) per pair . . .	1. 50

CLASS XX.—Saddlery.

Blankets:					
Horse, per sample.....	each..	\$6. 00	Halters, 5 ring, per sample.....	each..	\$0. 90
Horse, per sample.....	do....	4. 50	Harness dressing, quarts, Frank Miller's,		
Lap-robe, per sample.....	do....	3. 00	per dozen.....		3. 25
Brushes:			Harness oil, quarts, Frank Miller's, per		
Horse, per sample.....	per dozen..	26. 00	dozen.....		3. 25
Horse, per sample.....	do....	16. 00	Machine, clipping, New World's Ameri-		
Mane, per sample.....	do....	4. 25	can, star brand, reversible, per sample,		
Mane, per sample.....	do....	2. 75	each.....		2. 25
Bridles, horse, box loops, per sample, each		2. 24	Nets:		
Bits, bridle, per sample.....	per dozen..	10. 75	Leather, per sample.....	each..	2. 00
Cards, horse, per sample.....	do....	. 65	Ear, per sample.....	do....	. 60
Combs:			Snap, German harness:		
Curry, per sample.....	do....	1. 49	5/8-inch.....	per dozen..	. 12
Curry, per sample.....	do....	1. 00	1/2-inch.....	do....	. 12
Mane, per sample.....	do....	. 99	3/4-inch.....	do....	. 12
Cloths, rubbing.....	do....	4. 00	1-inch.....	do....	. 18
Harness:			1 1/2 inch.....	do....	. 20
Buggy, single, full nickel mounted,			1 3/4 inch.....	do....	. 25
wire pattern, breast collar, one inch			1 1/2 inch.....	do....	. 25
traces, 3 1/2-inch tree, flat reins (rus-			2-inch.....	do....	. 20
set or black) best oak-tanned leather,			Straps:		
all hand made with 10 stitches to			Hitching, 1 1/2-inch wide, 6-feet long,		
the inch.....	each..	23. 00	German snap on one end and buckle		
Coupé, single, full nickel mounted,			and billet on the other end.....	each..	. 39
wire pattern, full nickel hames,			Hame.....	do....	. 13
patent-leather case collar, 5-inch			Halter, 1 1/2-inch wide, 6-feet long,		
tree, 4 rows stitching in traces, flat			buckle and billet on one end.....	each..	. 38
reins (russet or black), 1 1/2-inch traces,			Surcingle, webbing:		
leather-lined pad to saddle, center-			Per sample.....	each..	. 22
bar buckles, best oak-tanned har-			Per sample.....	do....	. 19
ness leather, all hand made, 10			Whips, per sample:		
stitches to the inch.....	each..	34. 98	6-foot.....	do....	. 69
Wagon, single, full nickel mounted,			6-foot.....	do....	. 86
wire pattern, iron hames, low top,			7-foot.....	do....	. 95
good plain leather collar, 5 1/2-inch					
tree, 1 1/2-inch traces, 2 rows stitching					
in traces, flat reins, black, all hand					
made, best oak-tanned harness					
leather, 8 stitches to the inch, each.		22. 00			

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